(No Model.)

A. UHLMANN.

INK DRIER.

No. 579,850. Patented Mar. 30, 1897.

Fig. 1.

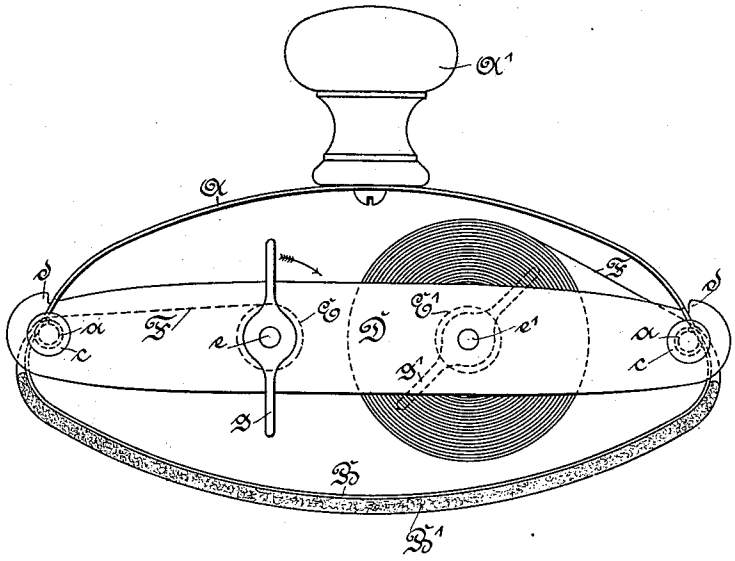


Fig. 2.

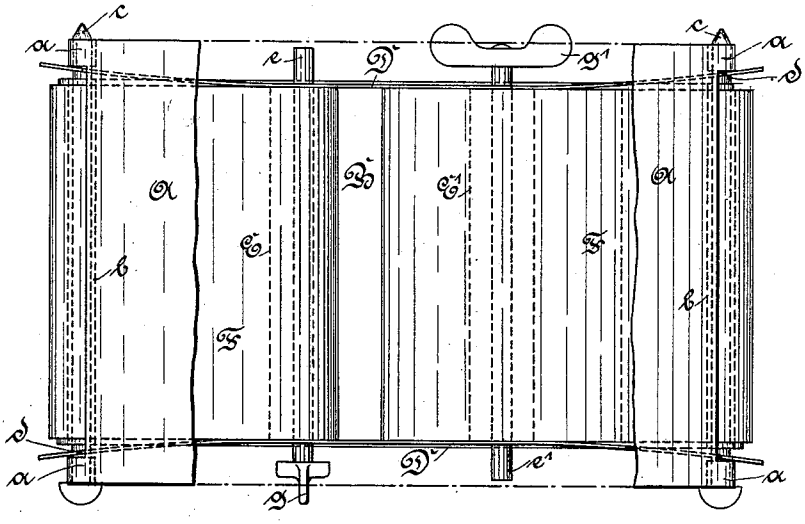
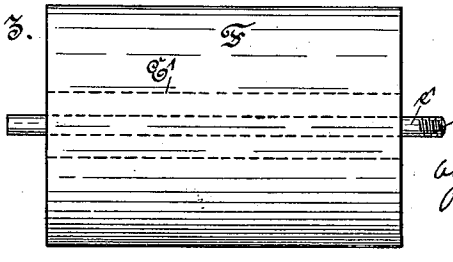


Fig. 3.



Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ANTON UHLMANN, OF OLBERNHAU, GERMANY.

INK-DRIER.

SPECIFICATION forming part of Letters Patent No. 579,850, dated March 30, 1897.

Application filed November 17, 1896. Serial No. 612,469. (No model.) Patented in Belgium November 30, 1896, No. 124,535.

To all whom it may concern:

Be it known that I, ANTON UHLMANN, a subject of the King of Saxony, residing at Olbernhau, Saxony, Germany, have invented certain new and useful Improvements in or Relating to Ink-Driers, (for which I have obtained Letters Patent in Belgium, No. 124,535, dated November 30, 1896,) of which the following is a specification.

The object of the present invention is a blotting-pad having two rollers, to which the ends of a strip of blotting-paper are secured in such manner that as the strip, guided over a convex surface, is used up or rendered useless it is unwound from one roller and wound up on the other. The article is made so as to enable it to be easily taken to pieces in order to replace the blotting-paper, which will be sold ready wound on rollers having central spindles, the apparatus consisting of as few parts as possible, which is effected by causing one part to serve for several different purposes, as, for instance, the sides in which the spindles of the rollers are supported act also as a brake for said rollers, and with their hooked ends serve as stops or abutments.

In the following description reference is made to the accompanying drawings, in which—

Figure 1 is a side elevation of the article. Fig. 2 is a plan in which the central portion of the upper part is broken away in order to show the parts arranged under it. Fig. 3 is a view of a roll of blotting-paper with roller and spindle.

The blotting-pad consists, first, of an upper part A and a lower part B. The latter consists of a convex spring or elastic piece of sheet metal. The former can also be a piece of sheet metal, but may be of different material. A is provided with a knob A′, which serves as a handle, and it has at its four corners projections or eyes *a*, which slightly project from the transverse edges, Fig. 2, and surround the tubular edges *b* of the plate B, which edges extend the whole width of the lower part B and over which edges the strip of blotting-paper is guided when unwound or wound up on the rollers. Through *a* and *b* on each side is passed a pin *c*, whereby the upper and lower part are connected to each other so that they may be easily disconnected, and, as will be hereinafter shown, these parts are connected with the sides of the article. The lower surface of B, over which passes the strip of blotting-paper, is preferably covered with a layer B′ of some soft material, such, for instance, as felt.

D D are two sides or cheeks of springy sheet metal, which in consequence of their elasticity always have a tendency to bend inward, as indicated in Fig. 2. In the ends of D D are holes through which the pins *c c* pass. The sides are arranged on the pins between *a* and *b*, and owing to their elasticity they press against *a* and against the rollers. Over the pins *c c* the sides or cheeks are formed into hooks *d d*, against which bear the transverse edges of the upper part A when pressure is exercised on A′. Thus the strain of the pressure exercised when using the article is taken off the weak lugs *a*, and A is protected against deformation and injury.

In D D are supported the spindles *e e′*, on which are secured rollers E E′, preferably made of wood. A long strip of blotting-paper F is glued fast at its end and wound on one of the rollers, say on E′. Such a roller provided with blotting-paper is shown in Fig. 3. On the free end of the strip F may also be glued a (empty) roller with spindle. If this is not the case, the free end of the strip F may be secured on the second roller E after having been properly stretched in place.

It is clear that in tending to bend inward the sides or cheeks D D must exercise a pressure on the ends of the rollers E E′, which pressure acts as a brake, that is to say, makes the rotation of the rollers more difficult. Thus the blotting-paper on B′ is always maintained stretched, while on the other hand the braking action is not strong enough to prevent rotation of the rollers by hand. The latter is effected by means of suitable handles which are mounted on the ends of the spindles *e e′* so as to be easily removable. For instance, they can be thumb-nuts *g g′*, screwed on the screw-threaded portion g^2 of the spindles, Fig. 3. According to Fig. 2 the handles are arranged on the opposite sides of the pad. They may, however, be arranged on the same side. The spindles may also be provided with screw-threaded portions on both ends. It is important to provide each spindle with

a handle, although whenever one roller is rotated in the direction of winding up the other is also caused to rotate in the direction of unwinding. If the roller E′, Fig. 1, which already is almost fully covered with wound-up blotting-paper, were to be rotated farther in the direction of winding up, then in consequence of the great ratio between the large circumferenee of the roller E′ and the small circumference of E the paper would be exposed to a great strain and might break. The nearly-empty roller E is therefore rotated first by means of its handle *g* in the direction of unwinding and then the winding up on the full roller E′ is effected. Moreover, when there are two handles it is possible to wind up on either roller, as desired.

For the purpose of putting in a new roller or rollers of blotting-paper the article is taken to pieces, the handles *g g′* are unscrewed and the pins *c c* are withdrawn, the rollers (or one, the full one) are taken out and the new roller or rollers put in. From the full roller the paper is guided, after the pad has been again put together and the handles screwed on, over *b* and B′, Fig. 1, then over the other edge *b* to the empty roller. When the paper arranged on B′ is saturated with ink, the strip F can be wound up on E. A strip which has once passed over the blotting-pad can be turned over, so as to use its other surface before it is thrown away.

I claim—

1. A blotting-pad device consisting of a convex under support for the blotting-paper, and an upper plate, connected together by spindles passed through their tubular edges, elastic side plates also secured on said spindles and provided with hooks or notches at their ends which serve as abutments for the upper pressure-plate, said side plates supporting and acting as a brake upon two rollers for the blotting-paper, which is passed from one roller around the outer side of the under plate and thence to the other roller, said rollers being operated by handles fitting the spindles of the rollers.

2. A blotting-pad device consisting of a convex support B, upper plate A, tubular edges *b* and *a* of these plates, spindles *c*, side spring-plates D, rollers E E′, spindles *e e′*, and handles *g g′* substantially as described.

3. In a blotting-pad the combination with the upper and lower plates, the pins for connecting said parts together and the side plates carried by said pins provided with notches or hooks at their ends against which the edge of the upper plate bears when pressure is applied thereto, as and for the purpose set forth.

In testimony whereof I have hereto set my hand in the presence of the two subscribing witnesses.

ANTON UHLMANN.

Witnesses:
OTTO WOLFF,
G. A. ANTRIM GREGG.