(No Model.)

A. S. JOHNSTON.

BLOTTER.

No. 351,266. Patented Oct. 19, 1886.

Fig. 1.

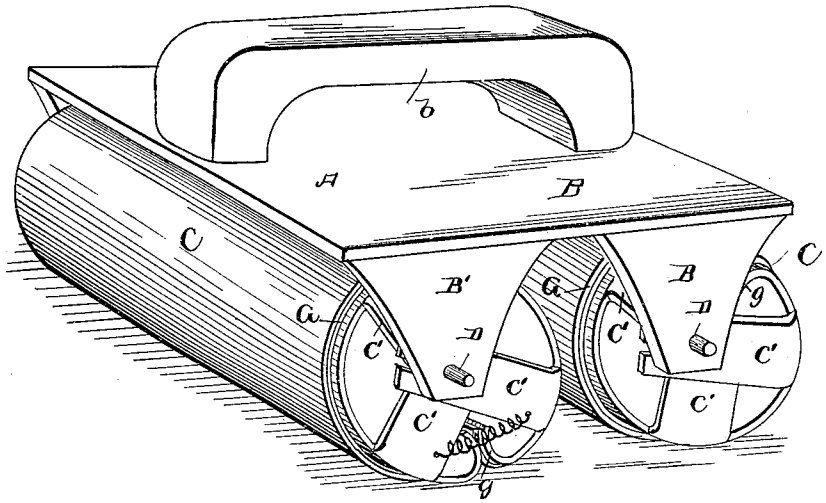


Fig. 2.

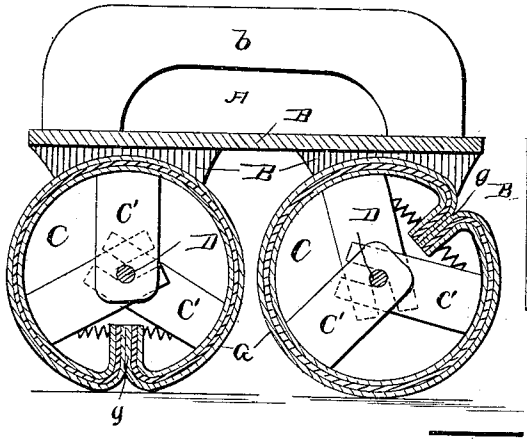


Fig. 3.

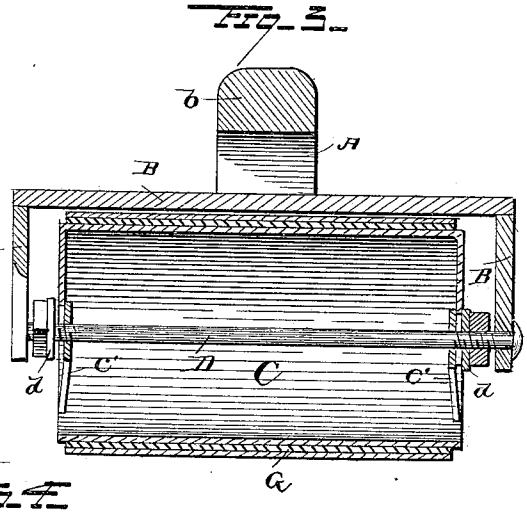
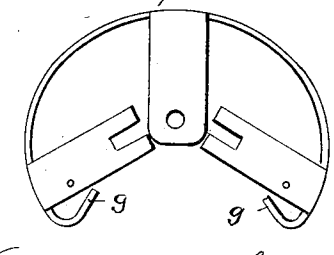


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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BLOTTER.

SPECIFICATION forming part of Letters Patent No. 351,266, dated October 19, 1886.

Application filed July 14, 1886. Serial No. 208,012. (No model.)

To all whom it may concern:

Be it known that I, ALBERT SIDNEY JOHNSTON, a citizen of the United States, residing at Sprague, in the county of Lincoln, Washington Territory, have invented a new and useful Improvement in Blotters, of which the following is a specification.

My invention relates to improvements in blotters; and it consists of the peculiar construction and combination of the various parts for service, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

The object of my invention is to provide means for effectually and easily taking up the surplus ink from writings of letters and all other similar papers; to provide improved means for replacing and interchanging worn-out blotter-pads with new and fresh pads when the old pads have become useless through the excessive ink absorbed thereby; to provide means for securely and firmly clamping and retaining the blotter-pads in the rollers of the blotter and without any danger of the pads becoming accidentally detached; and to improve the device in minor details, so that it will be simple, strong, and durable in construction, cheap and inexpensive of manufacture, and easily operated.

In the accompanying drawings, which illustrate a blotter embodying my invention, Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical central sectional view. Fig. 3 is a vertical central sectional view through the longitudinal axis of one of the rollers, and Fig. 4 is a detached view of one of the rollers embodying my invention.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the supporting or carrying frame of my improved blotter, which comprises a plate, B, of square, rectangular, circular, or any other design, a handle, *b*, rigidly secured to and carried by the plate, and of any suitable form, and the hangers B′, which depend from the plate B at the side edges thereof, two pairs of hangers being employed to support two independent rollers, C. These rollers C are arranged one in front of the other, and they are preferably made of metal and cylindrical or tubular in form. At their ends the cylindrical rollers are provided with radial arms or spokes C′, which are preferably formed from the same piece of metal as the cylindrical roller itself, and integral therewith, and the inner terminal ends of these arms or spokes meet or tend toward a common center. The arms are each provided with a transverse opening, or a slot, as shown, in which the extremities of a central shaft or axis are journaled. This shaft D extends through the rollers and the arms or spokes thereof, and the ends of the shaft are journaled in openings or bearings formed in the lower portions of the hangers B′, one end of the shaft having a head which bears against one of the hangers, and the opposite end of the shaft being threaded to receive a securing-nut, which bears against the opposite hanger of the pair in which the shaft and the roller carried thereby are supported. Washers *d* are interposed between the hangers and the ends of the roller, and they may also be interposed between the head of the shafts and the binding-nuts thereon and the hangers, as is obvious.

Each of the rollers is bent or formed from a single piece of sheet metal or other suitable material, and the free edges of the blank or material from which the roller is formed are bent upon themselves, or at right angles, to form lips or flanges *g*, which are in contact with each other, and between which the free edges of the pads G are fitted and clamped thereby. The free edges of the roller thus formed are adapted to be separated or forced apart by hand to permit of the insertion and withdrawal of the free edges of the pad, and the outer surface of the roller, where the lips or flanges are formed, lies concentric with the circle described by the remaining section or portion of the periphery of the roller, so that no uneven or undulating surface is presented to act upon the paper on which the ink has not sufficiently dried, which uneven surfaces in the periphery of the roller is liable to cause the roller to ineffectually perform its proper office or function. The arms or spokes of the roller nearest the free edges or lips thereof are connected by means of a coiled or other spring, which serves to normally draw and hold the flanges in contact with each other, or upon the free edge of the pad G, clamped between them, and when the flanges are separated the springs are extended to permit the with-

drawal of the pad in interchanging or replacing it with other fresh and unused pads, as is obvious.

The peripheries of the rollers are arranged in the same line or plane, so that they act upon the paper very evenly and uniformly to effectually and perfectly absorb all of the surplus ink or other matter upon the paper or other surface over which the blotter is forced by hand, and the rollers can be readily detached by simply unscrewing the nut on the shafts thereof and withdrawing the shafts from the arms or spokes of the roller and the hangers of the frame A, so that the rollers can be easily and readily operated upon to remove the old and worn-out pad and replace it with a new and fresh pad, these operations being easily and readily performed.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the drawings.

My improved blotter is very simple, strong, and durable in construction, thoroughly effective and reliable in operation, and cheap and inexpensive of manufacture. The rollers rotate freely and independently of each other, and are actuated by frictional contact with the surface over which they are forced, and the lips or flanges of the roller bind upon the pad, which is made of absorbent paper or other suitable material, to clamp the pad in place and prevent the accidental detachment thereof, and also prevent the pad from becoming torn and loose, as it is very firmly held in contact with and around the periphery of the roller over which it is fitted.

In lieu of making the roller in one piece of metal, it may be made in two sections, which are hinged or pivoted together and normally in contact at their edges, on which the lips are formed by means of coiled or other springs.

Various slight changes in the form and proportion of parts and details of construction may be made without departing from the principle of my invention.

Each roller is provided at each end with three radial arms or spokes, C', preferably, and the inner ends of two of these arms are provided with longitudinal slots which open through the ends of the spokes. The shaft or axle of the roller passes through the slots and an opening in the other arm or spoke, and on the ends of the shaft or axle are fitted washers, which prevent the spokes from coming in contact with and binding on the hangers. By means of the longitudinal open slots in the arms or spokes the roller can be forced open to separate the lips and remove the blotter without detaching the roller from its axle or the frame.

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

1. A blotter having a roller journaled in suitable bearings provided therefor, and removable from the bearings, the roller being provided with radial arms or spokes and the lips or flanges, and the springs connected with the arms for normally forcing the lips toward each other to bind upon a pad, substantially as described.

2. As a new article of manufacture, a blotter comprising a frame having the hand-piece and the depending hangers, and the rollers journaled in the hangers and removable therefrom, each of the rollers being provided with the integral arms or spokes and the flanges or lips, and the coiled springs connected with the arms or spokes for normally drawing the lips together to bind upon the free edges of a pad which incloses the roller and is inserted between the lips thereof, substantially as described, for the purpose set forth.

3. A roller for blotters, comprising a shell having the lips and the radial arms or spokes through which the shaft or axle passes, two or more of the spokes having longitudinal open slots, substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALBERT SIDNEY JOHNSTON.

Witnesses:

P. K. SPENCER,

W. B. LETTMAN.