

O.H. Reed & A.L. Carrier.
Washing Mach. for Inking Rollers.
N^o 84904. Patented Dec. 15. 1868.

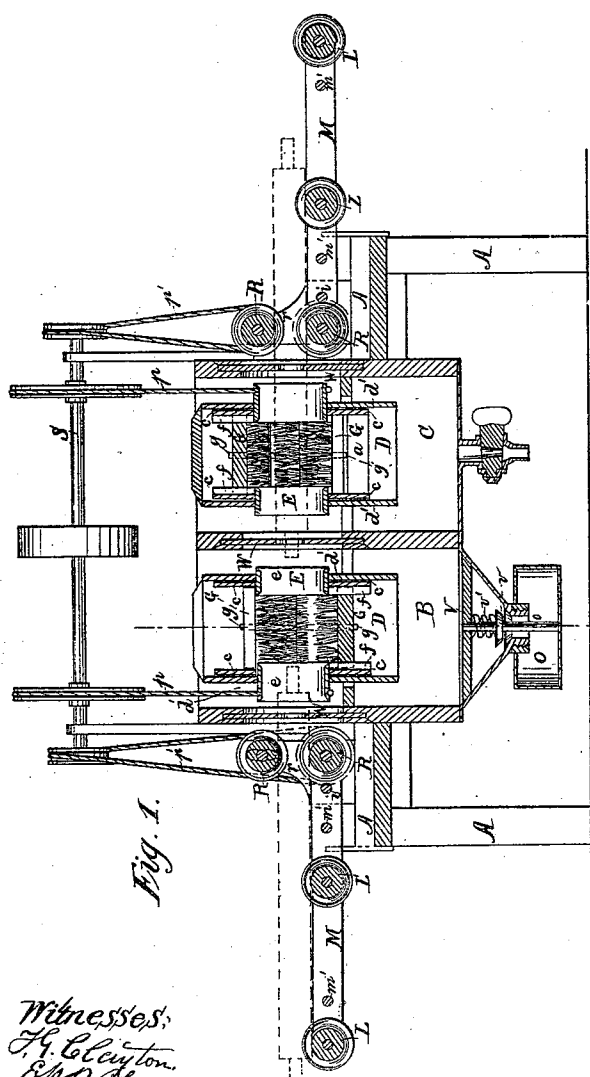


Fig. 1.

Witnesses:
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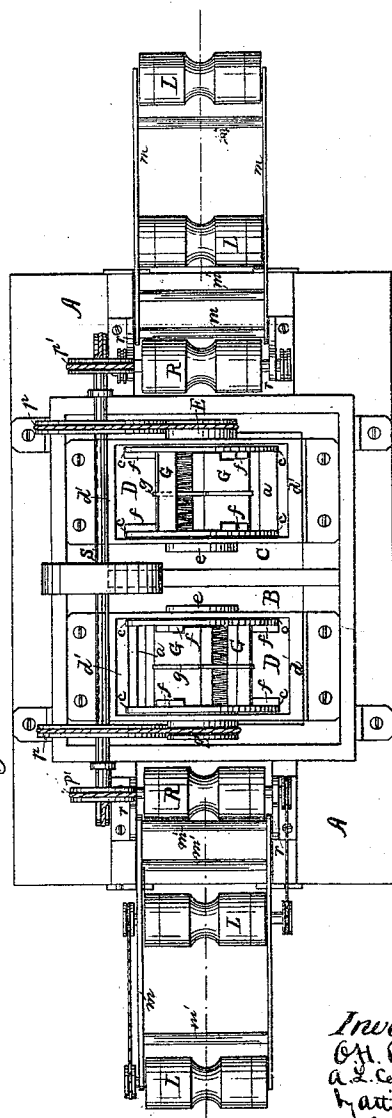


Fig. 2.

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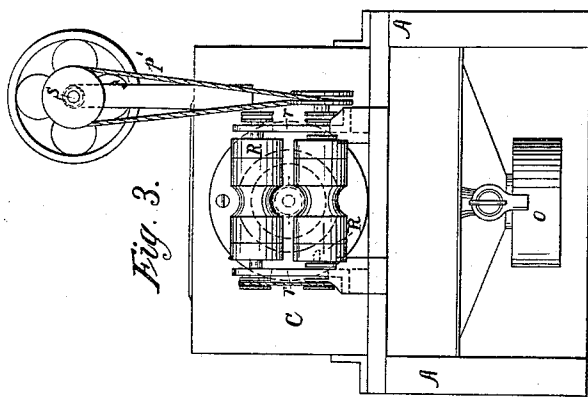


Fig. 3.

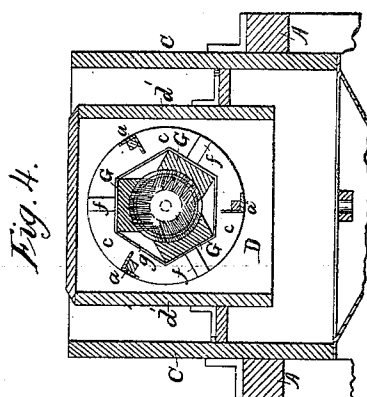


Fig. 4.

United States Patent Office.

O. H. REED AND ASA L. CARRIER, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 84,904, dated December 15, 1868.

MACHINE FOR WASHING PRINTERS' INK-ROLLERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that we, O. H. REED and ASA L. CARRIER, both of Washington, in the county of Washington, and in the District of Columbia, have invented a certain new and useful "Machine for Washing Printers' Inking-Rollers;" and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a longitudinal section of our invention;

Figure 2 is a plan view of the same;

Figure 3 is an end elevation; and

Figure 4 is a transverse section through the centre of one of the boxes containing the brushes.

The nature of our invention consists in constructing a machine, which shall, by means of revolving brushes, scrubbing the surface of printers' inking-rollers with lye and water, clean them, and then, by causing them to pass through wipers, make them dry; the ink-rollers to be carried through the brushes and wipers (and thus cleaned) by simple apparatus; all of which will be more fully hereinafter described with the other parts of our invention for washing printers' inking-rollers.

To enable those skilled in the art to make and use our invention, we will now proceed to describe its construction and operation.

A stand, A, about three feet long by fifteen inches wide, and of a convenient height, is provided, through which we let a box containing two compartments, (B and C,) securely fastened to the stand A.

B is the compartment, into which the lye or other suitable liquid is poured, until its upper surface is just below the opening in the wipers W.

The bottom of this compartment is made to slope to its centre, and that is several inches lower than the bottom of compartment C.

The centre of the bottom has an orifice through a nozzle, with a thread cut on its outer side, by means of which the mouth of the dirt-box O is screwed to it, and box O is secured in its place.

Dirt-box O is intended to receive all the dirt that is taken from the ink-rollers in passing through compartment B, so that the dirt can be readily removed when it accumulates.

While the box O is fulfilling its office by collecting the dirt, the rod *o*, with its valve *v*, is held up in the position shown in fig. 1. But when the box O is being removed, to empty the dirt, the spring *v'* presses against the valve *v*, and thus causes the rod *o* to slide down through the hole in its guide-bar V until the valve *v* rests upon the bottom of compartment, and closes the orifice. The dirt-box O can then be emptied without any waste of the lye.

Water is poured in compartment C, of the same height as the lye is in compartment B. Its bottom is flat, and has a cock fitted in it, by means of which the water, when it becomes dirty, is drawn off.

In each of compartments B and C there is a box, D, not so wide, long, or high as either of them.

Each box, D, has a close cover, *d*, an open lower side; two of its opposite sides made close, *d* and *d*, and secured thereby to the compartments in a secure manner, as seen in fig. 4; and the two remaining sides of

each box D, (marked *d*), have circular openings in their centres, which serve as bearings for hubs *e* and *e'* of the reel E.

Each reel E is constructed with two hubs, *e* and *e'*, from which the encircling disks *c* expand. These disks, *c*, are united together by bolts or braces *a*, which are constructed so as to assist in dashing the lye or water copiously among the brushes.

On the inside of each disk *c* there are secured three guides, *f*, as shown in fig. 4, which project out from the disks *c* into corresponding recesses in the opposite ends of all the brushes G.

The brushes are made of stiff bristles, or other suitable material, and the hair-side of each brush is made concave, so as to fit the convexity of the ink-roller.

The brushes are held by an elastic band, *g*, or other suitable means, tightly against the ink-roller while the reel E is being revolved.

The compartments B and C have what we term a wiper, W, in their outer ends, and one in the partition between them.

The wipers are disks of rubber, secured to their respective positions on the compartments, over circular holes therein, which holes are of sufficient size to admit of the easy passage of the largest-sized ink-roller.

In the centre of each wiper is an opening for the passage of the roller to be cleaned.

M is a frame-work for supporting the rollers L, upon which the inking-rollers are carried.

R R are two pairs of feed-rollers, made of rubber, or other yielding substance, to act upon and feed in and out the inking-rollers. They are driven by belts *p'* from shaft S.

Having fully described our invention,

What we claim as new in a machine for washing inking-rollers, is—

1. The double box B C, for containing a cleansing-solvent and clear water, in combination with the brushes G, constructed and operating substantially as and for the purposes set forth.

2. Two or more brushes G, constructed and operating substantially as and for the purposes set forth.

3. The boxes D D, constructed and operating in combination with boxes B C, substantially as and for the purposes set forth.

4. The dirt-box O, provided with rod *o*, valve V, and spring *v'*, constructed and operating substantially as described.

5. The reels E, provided with disks *c*, substantially as and for the purposes set forth.

6. The elastic wipers W, constructed and operating substantially as and for the purposes set forth.

7. The elastic feed-rollers R, constructed and operating substantially as and for the purposes set forth.

In testimony that we claim the above-described certain new and useful "machine for washing printers' inking-rollers," we have hereunto signed our names, this 7th day of May, 1868.

O. H. REED.

ASA L. CARRIER.

Witnesses:

JO. C. CLAYTON,

T. G. CLAYTON.