(No Model.) 2 Sheets—Sheet 1.

J. L. MORRIS.

APPARATUS FOR WASHING PHOTOGRAPHS.

No. 431,120. Patented July 1, 1890.

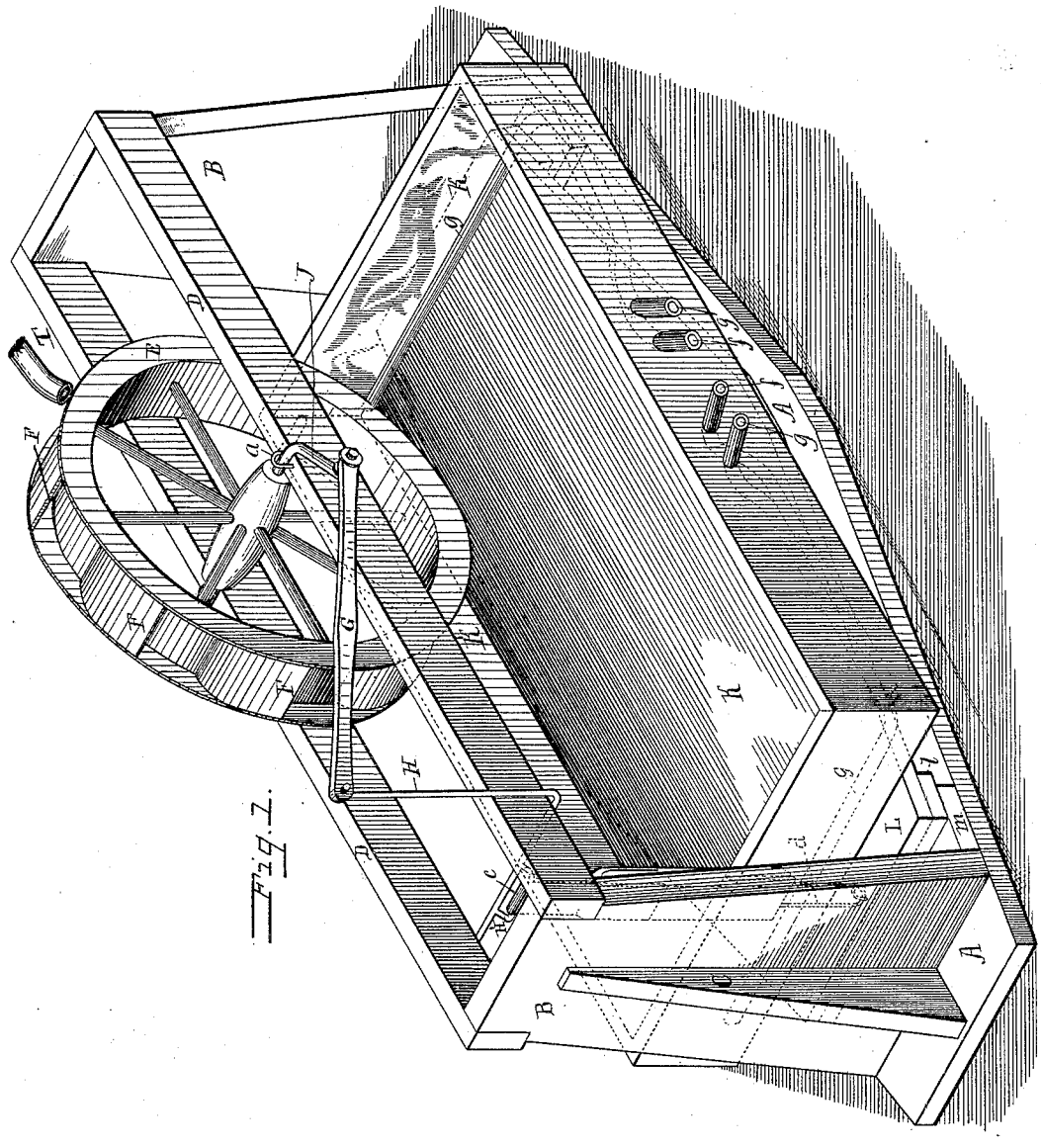


Fig. 1.

Witnesses

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

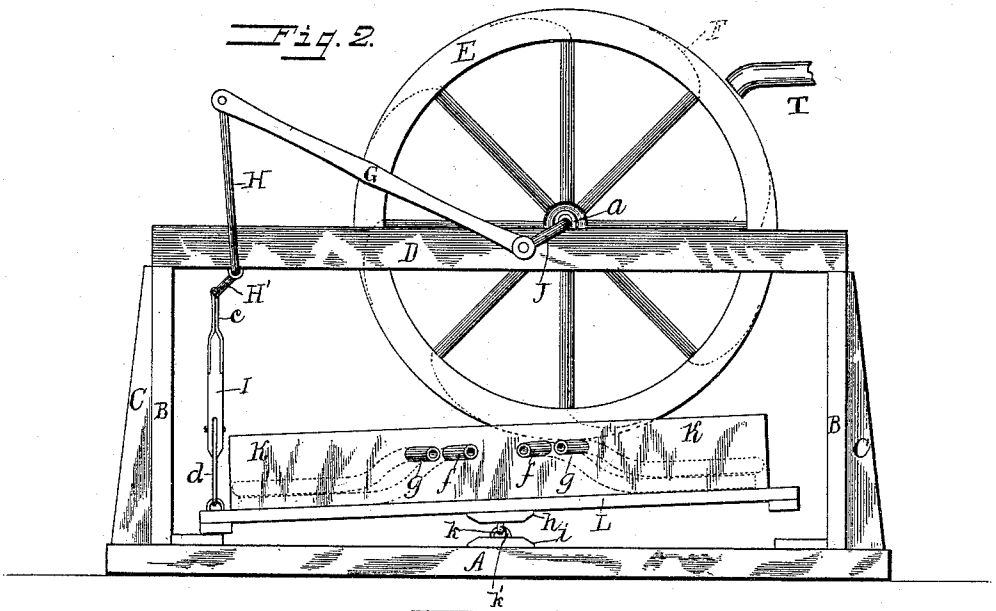


Fig 3

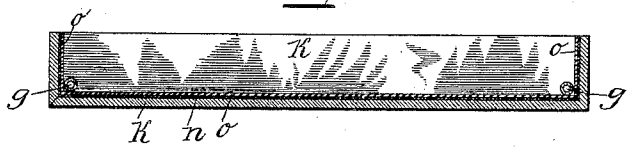
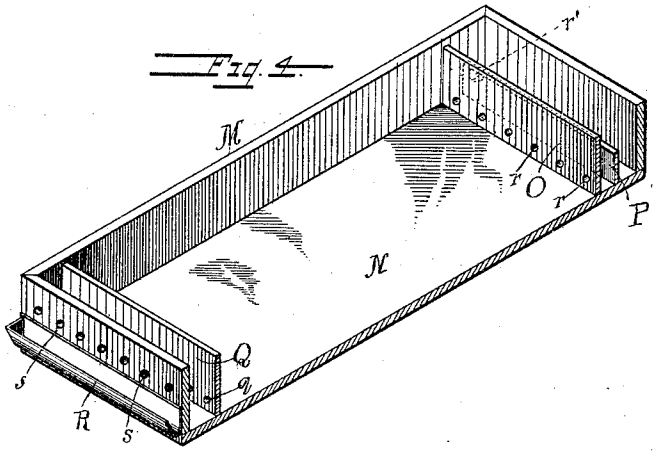


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH L. MORRIS, OF LAWRENCE, KANSAS.

APPARATUS FOR WASHING PHOTOGRAPHS.

SPECIFICATION forming part of Letters Patent No. 431,120, dated July 1, 1890.

Application filed August 20, 1889. Serial No. 321,383. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. MORRIS, of Lawrence, Douglas county, Kansas, have invented certain new and useful Improvements in Apparatus for Washing Photographs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved apparatus for washing photographic prints, having for its object to construct a simple, efficient, and compact device for conducting the process of eliminating chemicals from photographs by washing; and it consists in a novel construction and arrangement of parts, which are fully set forth hereinafter and claimed.

In the drawings which illustrate the manner of carrying out my invention, Figure 1 is a perspective view of the apparatus. Fig. 2 is a side elevation of the same. Fig. 3 is a central sectional view of the washing-tray to show the manner of lining the same; and Fig. 4 is a perspective view, partly in section, of the same, showing a somewhat modified manner of arranging its interior.

The frame of my apparatus consists of a base A, near the ends of which are arranged uprights B B, braced by the strips C, the upper ends of said uprights being connected by the horizontal bars D D. The water-wheel E, which is arranged between the horizontal bars and is provided with the buckets F, is secured to a crank-shaft J, which is mounted in keepers *a* on the bars D, said crank-shaft being connected by means of a pitman G to an oscillating lever H, also mounted on the said bars D and provided with a crank H′. A rocking platform L is arranged on the base A, and is provided with loops or staples *k* at or about its center, which interlock with staples *k′* on said platform. A staple *k* is arranged in a block *h*, and the staple *k′* is arranged in a block *i*, in order to give the platform greater freedom of motion.

The water-wheel is fed by a supply-pipe T, which is connected to a suitable reservoir, (not shown,) and as said wheel rotates it discharges the water into the washing-tray K, which is arranged on the platform L beneath the wheel, said platform being connected at one end to the crank H′ by means of a link I*cd*, whereby the rotation of the wheel will cause the rocking of the tray. The inner sides and the bottom of the tray are lined with cloth or other fabric, over which is placed a coating of wax to make the tray water-tight. The lining *n* and the coating *o* are clearly shown in Fig. 3. Drain-pipes *g* and *f* extend along the ends and front side of the tray, their front ends extending through the front side of the latter near the center, and their opposite ends being located in the rear corners of the tray, from which points the water is more readily drained while the tray is in motion. The front ends of said pipes are elevated slightly above the plane of their rear ends to prevent the water from draining too freely from the tray.

In the modified form of the tray which is shown in Fig. 4 partitions O Q are arranged near the ends, and are provided near their lower edges with perforations *r q*, through which the water is drained, and the end of the tray adjacent to the partition Q is perforated near its upper edge, as seen at *s*, and a trough R is secured to the end of the tray beneath the perforations *s* to receive the drain-water therefrom and conduct it to a suitable receptacle. Between the partition O and the adjacent end of the tray is arranged a small partition P, over which the water which drains through the perforations *r* must pass before it can be discharged through the opening *r′*, which is formed in the end of the tray.

It will be seen that the supply-water is discharged directly on the wheel, thereby enabling the speed of said wheel to be regulated by the flow of water, after which said water flows into the tray and then passes therefrom through several outlets, thus enabling the washing to be more thoroughly accomplished than when the water flows directly into the tray and then flows therefrom through a single outlet, in order that the drain-water may operate the water-wheel.

Having thus described my invention, I claim—

1. The combination of the frame having a base A, a rocking platform carrying a washing-tray and provided at about its center with keepers which interlock with keepers on said base, the water-wheel provided with a crank-shaft which is mounted on said frame, the water-wheel being arranged directly over the

said tray, and the lever H, connected to the crank-shaft and provided with a crank which is connected to one end of said platform, substantially as specified.

2. The apparatus for washing photographs, comprising the frame, the rocking tray mounted on the base thereof and having the drain-pipes, with their inlet ends at opposite ends of the tray and their discharge ends curved upward and projecting through the front side of the tray, the water-wheel mounted in the frame immediately above the tray and having the crank, the oscillating lever H, mounted in the frame and having crank H′, the pitman G, connecting the wheel-crank to said lever H, and the link I, connecting one end of the tray to the crank H′, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH L. MORRIS.

Witnesses:
J. P. NACE,
H. C. WHEELER.