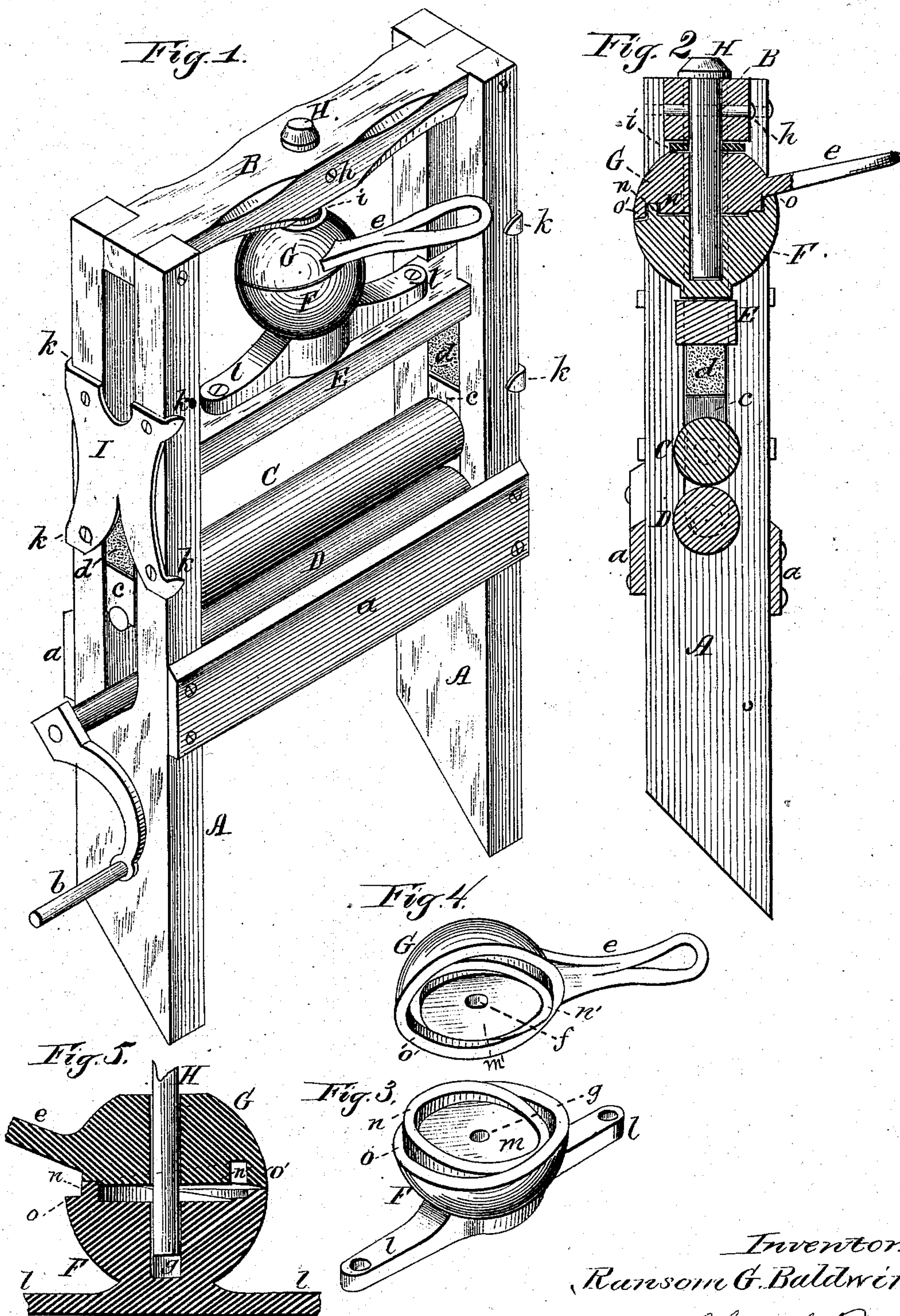


(Model.)

R. G. BALDWIN.  
Wringing Machine.

No. 238,271.

Patented March 1, 1881.



Witnesses:

H. C. McArthur,  
W. C. Lambert,

Inventor:  
Ransom G. Baldwin.

per Cha. H. Fowler.  
Attorney.



# UNITED STATES PATENT OFFICE.

RANSOM G. BALDWIN, OF OSKALOOSA, IOWA.

## WRINGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 238,271, dated March 1, 1881.

Application filed December 18, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, RANSOM G. BALDWIN, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Wringing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 of the drawings is a perspective view of my invention. Fig. 2 is a longitudinal vertical section thereof. Figs. 3 and 4 are detail views, in perspective, of the upper and lower halves or sections of the cam for regulating the pressure upon the upper roll of the wringing-machine. Fig. 5 is a vertical longitudinal section of the two cam-sections when together.

The present invention has relation to certain new and useful improvements in wringing-machines, and has reference more particularly to that class in which a cam-lever is employed for operating a pressure-bar, which, in turn, regulates the pressure of the upper wringing-roll upon the lower one.

The object of the invention is to provide the pressure-bar with a horizontally-operating cam so constructed that great cam-pressure is obtained with as little friction as possible, the pressure upon the bar being equalized upon its opposite ends, and consequently more perfect in its operation and action upon the upper wringing-roll of the machine. These objects I attain by the construction shown in the drawings and hereinafter described.

In the accompanying drawings, A represents the slotted standards, secured together on their front and rear sides by strips *a*, which also serve to guide the clothes to and from the rollers.

To the upper or slotted ends of the standards A is detachably connected, by suitable bolts, a rigid cross-bar, B, which, together with the side strips, *a*, and standards, form the frame-work of the machine.

C is the upper, and B the lower, wringing-roller, the journals of the lower roller resting upon the bottom of the slotted portion of the

standards, and one of said journals is provided with a suitable handle, *b*, for revolving it. The upper roller, C, which is supported by resting upon the lower roller, has loosely-fitting journal-boxes *c*, which embrace the upper portion of its journals, and are capable of vertically moving within the slotted standards as the pressure of the roller C is being adjusted. Above the boxes *c* are rubber or other suitable springs, *d*, which bear upon the boxes within the slotted standards A.

A pressure-bar, E, has tenoned ends, which fit loosely within the slotted standards A, and are capable of free vertical movement therein, the springs *d* supporting the tenoned ends of the pressure-bar.

To the upper side or face of the pressure-bar E is secured the lower section, F, of a compound cam, to be presently described, the upper section, G, of which is provided with a suitable handle, *e*, for operating it, and is held in operative contact with said lower section by a pin or bolt, H, passing down through the rigid cross-bar B, and through a central bore, *f*, in the upper section, and into a similar central bore, *g*, in the lower section, the bolt H being held stationary by a pin, *h*, passing through the rigid cross-bar B and bolt.

A suitable washer, *i*, is interposed between the upper section of the cam and rigid cross-bar, to prevent the upper section from coming in contact with the under side of the cross-bar, thereby preventing any wear by friction of said bar.

The slotted portions of the standards A are held firmly together by means of wrought-metal plates I, one upon each of the standards. These plates, which extend across the end faces of the standards, have ears *k* at each of their corners, said ears being bent around to clasp said standards on their front and rear faces.

It often happens that when rubber cushions or springs are placed between the roller-journals and pressure-bar within these slotted standards the lateral expansion of said rubber springs forces the slotted portions of the standards apart, splitting the lower portions, and resulting in the entire destruction of the standards. It is not enough that the slotted portions of the standards be held by a simple flat metal plate extending across the end portion



only of the standards, as the lateral pressure of the rubber springs against the inner sides of the slotted standards would wrench the screws loose and break off the heads. Consequently  
5 the plates would fail to perform their office.

The plates I that are employed are composed of heavy wrought metal, and as the direction of pressure upon the slotted portion of the standards is outward the ears *k* prevent undue strain upon the plates, and wholly  
10 prevent or avoid any danger of the breaking apart of the standards by the lateral expansion of the rubber springs or cushions, the slotted portion of the standards being firmly held together by the side clamping-ears.

The compound cam, consisting of the two sections F G, may be of any desired form exteriorly, but preferably of the form shown. The lower section, F, by means of ears *l*, is secured to the pressure-bar B, and is constructed  
20 with a central flat face, *m*, surrounded by two concentric rings, the inner ring, *n*, being formed to present an inclined plane with its highest part toward the rear of the machine, while the outer ring, *o*, is formed on a similar inclined  
25 plane, but with its highest part toward the front of the machine and diametrically opposite to the highest portion of the inner ring, *n*. The upper section, G, of this compound cam is also formed with a flat central portion, *m'*,  
30 and two concentric rings, *n' o'*, with inclined faces similar to those of the rings *n o*, but with the highest points of said rings diametrically opposite to the highest points of the rings upon the section F, so that on turning the  
35 handle *e* from right to left the inclined faces of each ring will immediately commence to bear upon one another. The arrangement of the

inclined faces, as described, insures the two sections operating immediately on the movement of the handle, and continuing to operate  
40 during its entire movement on diametrically-opposite portions, until, when the handle reaches its farthest limit of motion, the points of contact of the cam-surfaces are directly over the pressure-bar. In securing such continuous bearing-pressure immediately above and  
45 directly in line with the pressure-bar, it will be evident that a regular and even pressure is brought to bear thereon and throughout the entire length of said bar, which will avoid all  
50 "jerking" of the parts, and will, at the same time, admit of the handle being turned to any required distance around without necessitating the employment of ratchets, pawls, or other  
5 retaining devices, the form of the cam-surfaces furnishing a complete self-locking device, whatever their position.

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

In a wringing-machine, the combination, with the upper wringing-roller thereof and the loosely-fitting pressure-bar E, of the horizontal-operating compound cam consisting of the  
65 sections F G, having inner and outer concentric rings, each having inclined faces diametrically opposite each other, substantially as shown and described.

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

RANSOM G. BALDWIN.

Witnesses:

LOUIS BAGGER,  
AUGUST PETERSON.