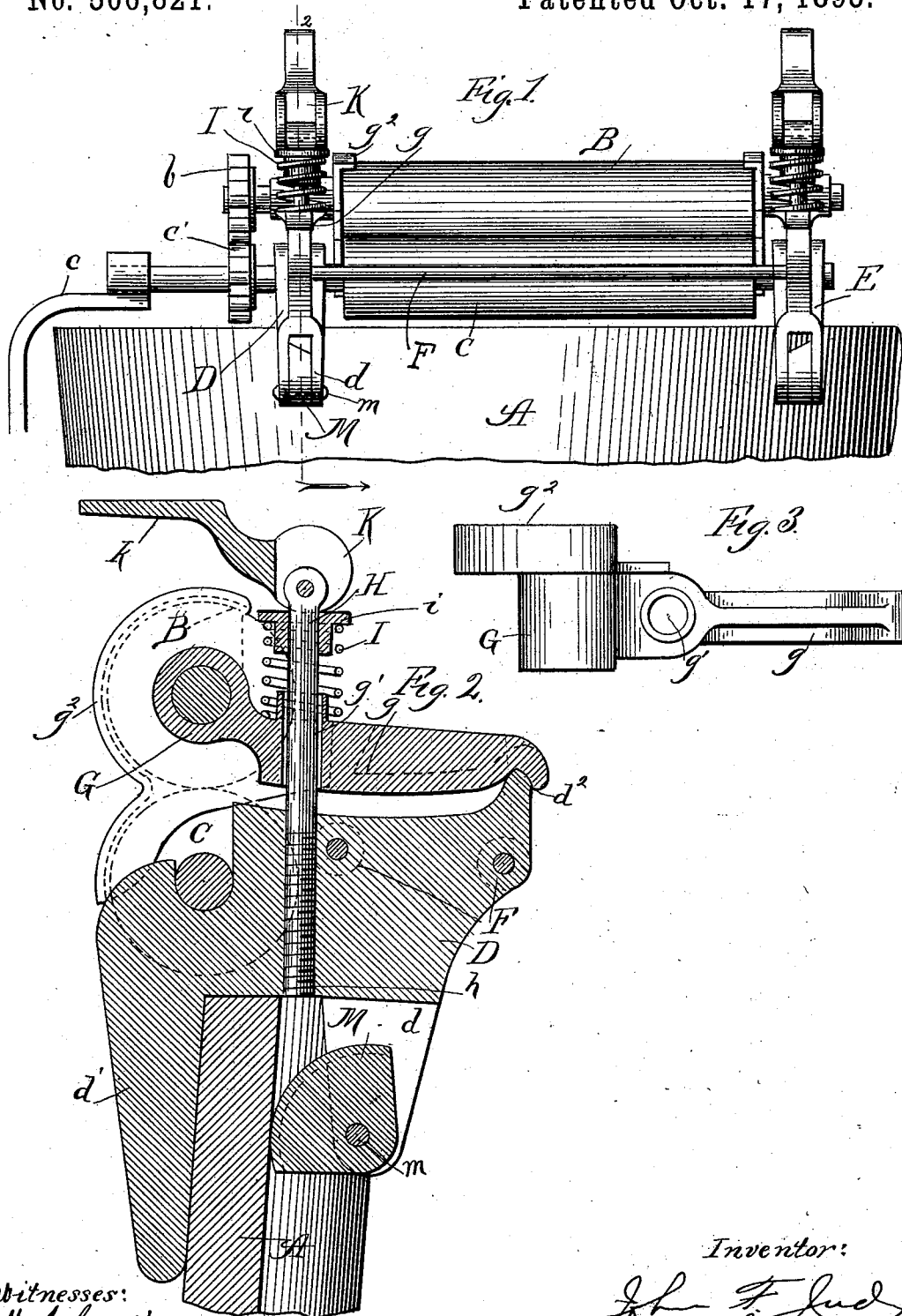


(No Model.)

J. F. JUDY.
CLOTHES WRINGER.

No. 506,821.

Patented Oct. 17, 1893.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN F. JUDY, OF CHICAGO, ILLINOIS.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 506,821, dated October 17, 1893.

Application filed April 16, 1893. Serial No. 470,431. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. JUDY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Clothes-Wringers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to clothes-wringers. Its object is to provide an improved means for adjusting the roller pressure and relieving it when the roller is not in use.

The invention consists in the use, in conjunction with adjusting screws for varying the roller pressure, of cam levers for reinforcing the screws, the adjusting screws acting upon laterally projecting arms of the journal boxes which form bearings at their ends.

It consists further in various details of construction as are hereinafter described.

In the accompanying drawings Figure 1 is an elevation of the outside of a portion of a tub with the wringer attached. Fig. 2 is a transverse section on the line 2—2 of Fig. 1. Fig. 3 is a detail of the upper journal block.

I show at A a portion of an ordinary wash-tub: at B C the ordinary upper and lower rollers of a wringer: at D E, the end pieces or heads within which the lower roller is journaled, and at c, an ordinary crank secured to the axle of the lower roller. The rollers are geared together by pinions *b c'*, mounted upon their shafts, and the heads D, E, are secured together by rods F F, which also serve as guides for the clothes as they leave the rollers.

The heads D, E, being exactly alike, I will describe but one of them. The head D is provided with two downwardly projecting legs, *d, d'*, the latter being adapted to rest against the inner surface of the tub, while the former is outside of the tub and somewhat removed from its surface. The leg *d* is vertically slotted transversely to the line of the tub, and within this slot a gravity cam M is pivoted by means of the pin *m*. When the wringer is placed upon the tub the cam M is

thrown over against the surface of the latter, and, as the first contact is with its smallest radius, any upward movement of the wringer tends to increase the pressure of the cam. The wringer is thus securely held in place until the cam is thrown back intentionally. The efficiency of the cam is increased by slightly beveling its contact surface. The upper edge of the head D, is provided with a bearing socket for the axle of the lower roller. This socket is preferably above the leg *d'* so that the rollers will be within the line of the tub rim, and is open upwardly for convenience in putting in or removing the rollers. A vertical screw threaded socket *h* for the reception of a screw bolt is located in the head piece near the bearing socket but outwardly from it, and the extreme outer and upper corner of the headpiece is in the form of an upwardly projecting fulcrum point *d²*. The upper roller B is journaled in blocks separate from the head pieces, one of them being shown at G (the block at the other end of the roller is of the same form). The block G has an outwardly projecting horizontal arm *g* whose end is in beak form to hook over the fulcrum point *d²*. The arm *g* is vertically apertured at *g'* to register with the socket *h*, the aperture *g'* being adapted however to allow the block to slide freely upon the bolt. The bolt H is set within the aperture *g'* and the socket *h*, and secures the block G and head D together. A cam K is pivoted to the top of the bolt H. A spiral spring I is placed upon the bolt between the cam K and the top of the block piece G and a washer *i* is interposed between the spring and the cam. The office of the cam is to compress the spring. The cam K is provided with a lever arm *k* so shaped that when the cam is thrown over so that its point of greatest thickness bears upon the spring the arm *k* will rest upon the arm *g* of the journal block.

Constructed as described, the journal block G is in the form of a lever of the third class, fulcrumed at *d²*. The roller B is pressed against the roller C with any desired force by the action of the screw-threaded bolt H, and the spring I affords the necessary resiliency. The cam K is used in lieu of a rigid bolt head for the purpose of affording means for in-

stantly relieving the pressure of the rollers for the accommodation of clothes of unusual thickness, and also to save the rubber rolls from damage due to the continuance of great pressure while the wringer is not in use.

At *g*² I show a shield preferably integral with the journal block G and adapted to cover the ends of the rolls in the usual manner.

I claim as my invention—

- 10 1. In a clothes wringer the combination with a pair of rollers and with a pair of journal heads or blocks for each roller, of screw bolts for connecting co-operating lower and upper blocks, said bolts being screwed into
- 15 the lower blocks, the upper blocks playing freely upon them, a spiral spring mounted upon each bolt above the upper block and a cam at the top of each bolt for varying the compression of the spring, substantially as
- 20 described and for the purposes specified.

2. The combination in a clothes wringer with a roller and fixed journal blocks or heads for carrying said roller, of an upper co-operating roller carried by adjustable journal blocks, each of said blocks having a projecting arm bearing at its outer end upon a shoulder of the lower block, adjusting screw bolts set in the lower blocks and passing through the upper blocks between their roller and their arm ends, spiral springs mounted on the bolts, and cams forming the bolt heads and adapted to vary the compression of the springs, substantially as described and for the purposes specified.

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

JOHN F. JUDY.

Witnesses:

L. K. GILLSON,
M. H. L. WING.