No. 655,534. Patented Aug. 7, 1900.

F. R. WELLS.

CLOTHES WRINGER.

(Application filed Sept. 9, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1

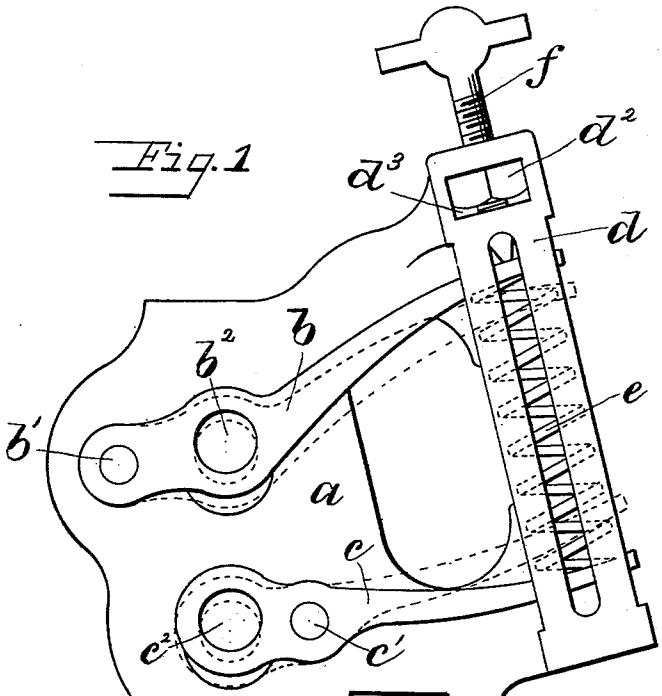


Fig. 3

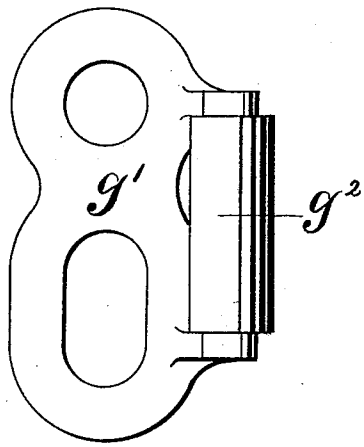


Fig. 4

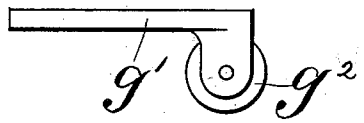


Fig. 2

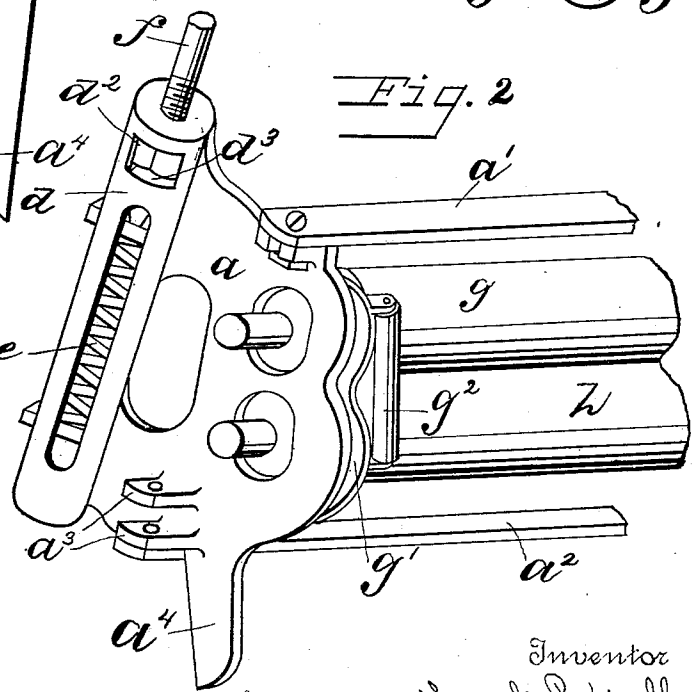
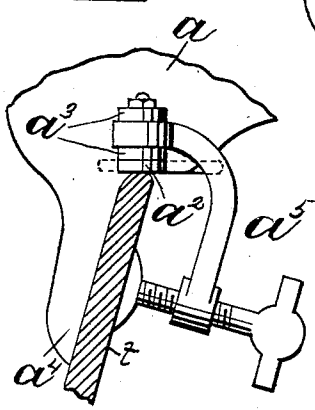


Fig. 5



Witnesses

Frank L. Walker

Earl G. Welch

Inventor

Frank R. Wells

By his Attorney Paul A. Wilkes

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 655,534. Patented Aug. 7, 1900.

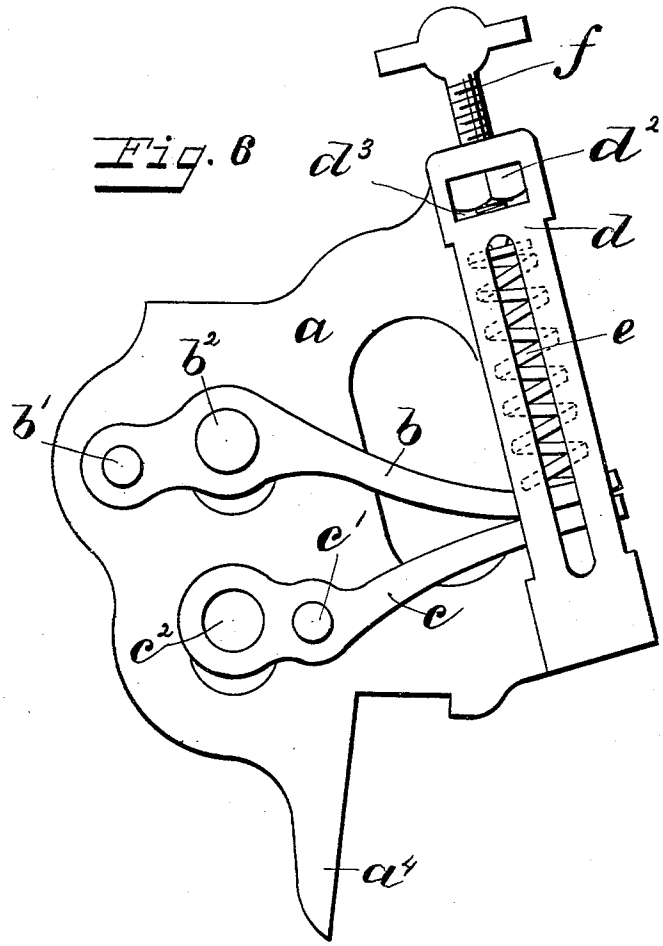
F. R. WELLS.

CLOTHES WRINGER.

(Application filed Sept. 9, 1899.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 6



Witnesses
Frank L. Walker
Chas. I. Milch.

Inventor
By his Attorney Frank R. Wells
Paul A. Staats

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK R. WELLS, OF SPRINGFIELD, OHIO.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 655,534, dated August 7, 1900.

Application filed September 9, 1899. Serial No. 729,923. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. WELLS, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Clothes-Wringers, of which the following is a specification.

My invention relates to improvements in clothes-wringers; and the object of my invention is to provide improved means for adjusting the rolls of the wringer and to simplify the construction of the same.

My invention consists in the constructions and combinations of parts hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a view of the inner side of one of the side frames of a device embodying my invention. Fig. 2 is a perspective view of one end of the wringer. Figs. 3 and 4 are detail views. Fig. 5 is a detail view showing the means for supporting the device. Fig. 6 is a view showing a modification of my device.

Like parts are represented by similar letters of reference in the several views.

In the said drawings, a represents one of the side frames of my improved wringer, the respective side frames being connected at the top by a tie-bar a' and at the bottom by an apron a^2, each of said side frames being provided with lugs a^3 to provide means for the attachment of the usual clamp a^5, which cooperates with the projection a^4 on said side frame, the apron a^2 being preferably connected to the lower lugs by the same bolt which fastens the said clamps. The inner side of each of said side frames is provided with inwardly-extending bosses b' and c', on which bosses are pivoted levers b c, the rear ends of which levers extend into a housing d, formed at the rear of said side frame and preferably cast integral therewith. Within said housing and between the respective ends of said levers I place a spring e, which spring normally tends to hold the ends of said levers apart.

The upper roll g of the wringer is journaled at each end in the respective levers b at b^2, the said levers being perforated at this point for that purpose, the said perforations b^2 being between the stud b', on which the lever is pivoted, and the rear end of said lever. The lower roll h is journaled at each end in the lever c at c^2, said levers being perforated at their forward ends for this purpose, so that the stud c', on which said lever is pivoted, will come between the roll and the outer end of said lever c.

The upper end of the housing d is provided with a screw-threaded adjusting-screw f, adapted to bear on the rear end of the lever b, as shown, the said housing being perforated at the top for the reception of this adjusting-screw and provided with a recess d^3, in which is inserted a screw-threaded nut d^2, through which the adjusting-screw is adapted to pass, the said nut being adapted to fit snugly within said recess to prevent the nut from turning therein, thus allowing the screw f to be adjusted up or down within said housing, this construction saving the necessity of tapping the said housing out at this point for the reception of the adjusting-screw, permitting the same to be more cheaply constructed. It will be seen by this construction that by turning the adjusting-screw f the lever b may be moved about its pivotal point b', carrying with it the upper roll g, and thus adjusting it to any desired extent in its relation with the lower roll, said upper roll being at all times rigidly held in its adjusted position against upward movement. The lower roll, however, is adapted to move downwardly to compensate for the varying thicknesses of the material passing therethrough, carrying with it in its downward movement the inner end of the pivoted supporting-lever c, the outer end of said lever rising against the tension of the spring e, which will return the said lever and roll to normal position against the upper roll g.

It will be understood that the adjusting device is the same at both ends of the respective rolls. It is obvious, however, that one adjusting-screw might be used for simultaneously operating both of the upper levers b by connecting the respective upper levers by a bar or rod and arranging the adjusting-screw to operate on said bar or rod and thence on the respective levers.

Interposed between the levers b and c and the ends of the rolls g h are the usual guards g'. At the forward sides of each of these guards g' I preferably journal a small roller

g^2, said roller extending at right angles to the axis of the respective rolls g h, the purpose of this roller being to prevent the clothes or other materials passing between the rolls g h from catching and tearing at this point and permitting same to pass more readily between said rolls.

In operation the apron a^2 will rest for practically its entire length on the upper edge of the tub or other support t and will sustain the entire weight of the wringer, the clamps a^5 being simply adapted to clamp the same firmly thereon, this construction affording a more firm and rigid support for the wringer than if supported by the clamps alone.

In Fig. 6 is shown a modification in which both the levers b c are placed below the spring e, the end of the upper lever resting upon the lower lever. The tension of the spring in this case, owing to the different pivotal points of the respective levers, will be to force the upper roll downwardly and the lower roll upwardly, the degree of compression being regulated by the adjusting-screw. In this construction both rolls will yield against the tension of the spring to compensate for different thicknesses of material passing therethrough.

Instead of spiral springs it is obvious that a flat or bow-shaped spring or springs might be arranged across the machine to bear against the respective levers to accomplish the same result.

I have described the adjusting device for the rolls as used in connection with a clothes-wringer; but it is obvious that it may be used in connection with rolls of other devices, such as burnishers, ironing-machines, &c.

Having thus described my invention, I claim—

1. In an adjusting device, upper and lower rolls, the upper roll being journaled in a lever pivoted at its forward end to a suitable support, the other end of said lever extending into a housing on said support, the lower roll being also journaled in a lever extending into said housing, said lower lever being pivoted to said support at a point between said lower roll and housing, a spring in said housing bearing against the respective levers, and means for depressing said upper lever against the tension of said spring, substantially as specified.

2. In a wringer, the combination with the side frames, levers pivoted on said side frames, rolls journaled in said levers, the outer ends of said levers extending into a housing formed at the rear of said support, a spring in said housing interposed between the ends of said levers, and an adjusting-screw above said housing adapted to bear against one of the said levers to vary the pressure between said rolls, substantially as specified.

3. In an adjusting device, upper and lower rolls, levers pivoted on the opposite sides of the axes of said rolls and arranged at the ends of the respective rolls so as to form bearings therefor, a spring acting against both of said levers and means for positively adjusting one of said levers in relation to the other lever, said other lever being adapted to yield against the tension of the spring, substantially as specified.

4. An adjusting device for rolls comprising two pivoted levers, one of said rolls being journaled in one of said levers between the pivotal point of said lever and the outer end thereof, a roll also journaled in the second lever, said second lever being pivoted at a point between said roll and the outer end of said lever, a spring or cushion adapted to exert pressure upon the outer ends of said levers, and means for adjusting the tension of said spring or cushion, substantially as specified.

In testimony whereof I have hereunto set my hand this 24th day of August, A. D. 1899.

FRANK R. WELLS.

Witnesses:
CHAS. I. WELCH,
CLIFTON P. GRANT.