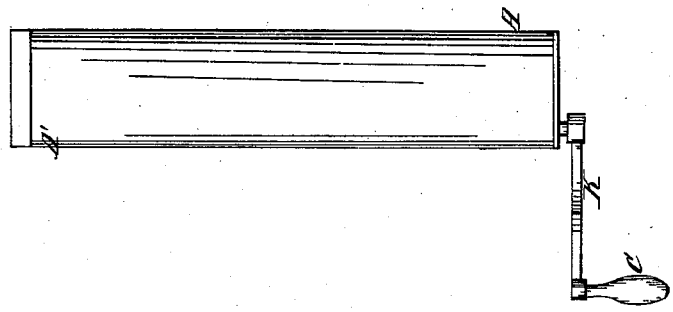
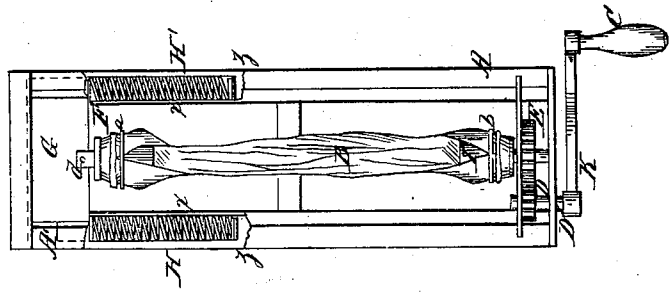
Higgins & Willard,

Wringer,

No. 28,752, Patented June 19, 1860.





Witnesses.

A. C. Gale

E. G. Allen

Inventor.

C. W. Higgins & A. S. Willard

by their attorney

V. L. Gale.

UNITED STATES PATENT OFFICE.

CHARLES W. HIGGINS, OF SOMERVILLE, AND A. S. WILLARD, OF CHARLESTOWN, MASSACHUSETTS.

CLOTHES-WRINGER.

Specification of Letters Patent No. 28,752, dated June 19, 1860.

To all whom it may concern:

Be it known that we, CHARLES W. HIGGINS, of Somerville, and ALBEN S. WILLARD, of Charlestown, both of Middlesex county and State of Massachusetts, have invented a new and Improved Construction of a Cloth-Wringer; and we do hereby declare the following to be a full and sufficient description thereof, reference being had to the accompanying drawings, making a part of the specification.

The nature of the invention respects the method of releasing the wringing cylinder or bag from its twist and causing it to extend itself by an automatic movement after the water has been expelled from it.

In the drawings, herewith accompanying Figure 1, represents a top view of the wringing box and the bag, the crank and gearing, the end part *a'*, being cut away for showing the springs H, H, and plate G. Fig. 2 an elevation of the same.

A, A', represent the box or trough which receives and discharges the water expelled from the cloth.

B, is the bag to contain the washed clothes during the wringing; C, the crank; D, the driving pinion; E, the pinion operating the wringing bag B; F, the block received by one end of bag; I, the block received by the other end of the bag, and over which blocks respectively are received rings (*a*, and *b*.).

G is a metallic plate to which the block F, is attached by means of the pin (*d*).

H, H', are spiral springs contained within the woodwork of the trough, and bearing against the edge of the plate G keep the bag taut while in the normal position; but when the crank (C) is turned, the bag B being supposed to be charged with wet cloth, pinion D meshing with the cogs of pinion E, which being moved rotates the block I and that end of the bag twisting it and expelling the water thereform, and shortening it at the same time, causing the edge of the plate, G, to advance toward the middle of the box and proportionally to compress the spiral springs H, H'.

When the crank has been turned sufficiently far to secure all the force that was necessary to be applied, the portion K is seized by the other hand and the pinion D is drawn out from its meshings with (E) into the position represented by the dotted outline; when the pinion being detached, bag B untwists and the springs H, H', extend themselves and plate G, resumes its position at the end of the trough. Thus, the arrangement and combination of the sliding shaft D with the spiral springs H, H', for operating the clothes bag B constitutes the principal feature of the apparatus herein described. The *z* ends of the spiral springs are made fast to the wood work within which it slides, following the pressure and movement of plate G.

It is not claimed that sliding shafts and pinions have never before been used for detaching as well as operating machinery in general; but as a compact, efficient, and useful means to operate the wringing bag, we claim that the sliding shaft with the crank on one part and the sliding pinion on the other constitutes a new means of operating the wringing bag; therefore

Having fully described the construction and operation of the cloth wringer, what we claim as our invention and desire to secure by Letters Patent is—

The arrangement and combination of the sliding shaft of pinion D with pinion E for operating the bag, B, substantially in the manner and for the purpose set forth.

In witness whereof we have hereunto subscribed our names.

CHARLES W. HIGGINS.
ALBEN S. WILLARD.

In presence of—
SYLVENUS WALKER,
WM. P. SPENCE.