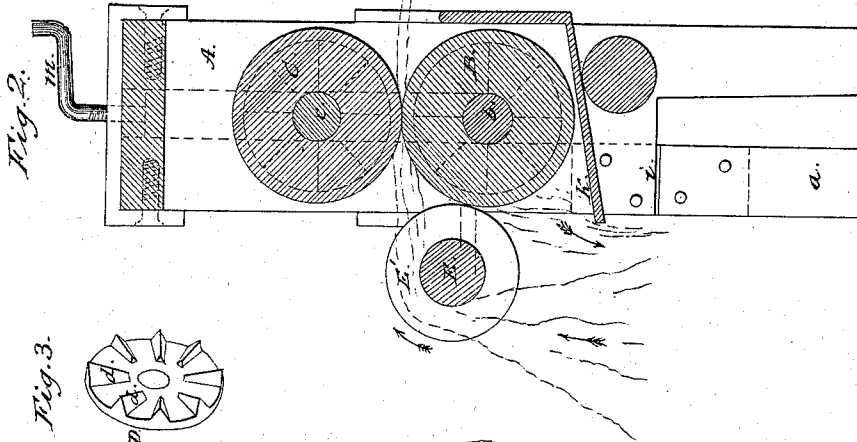
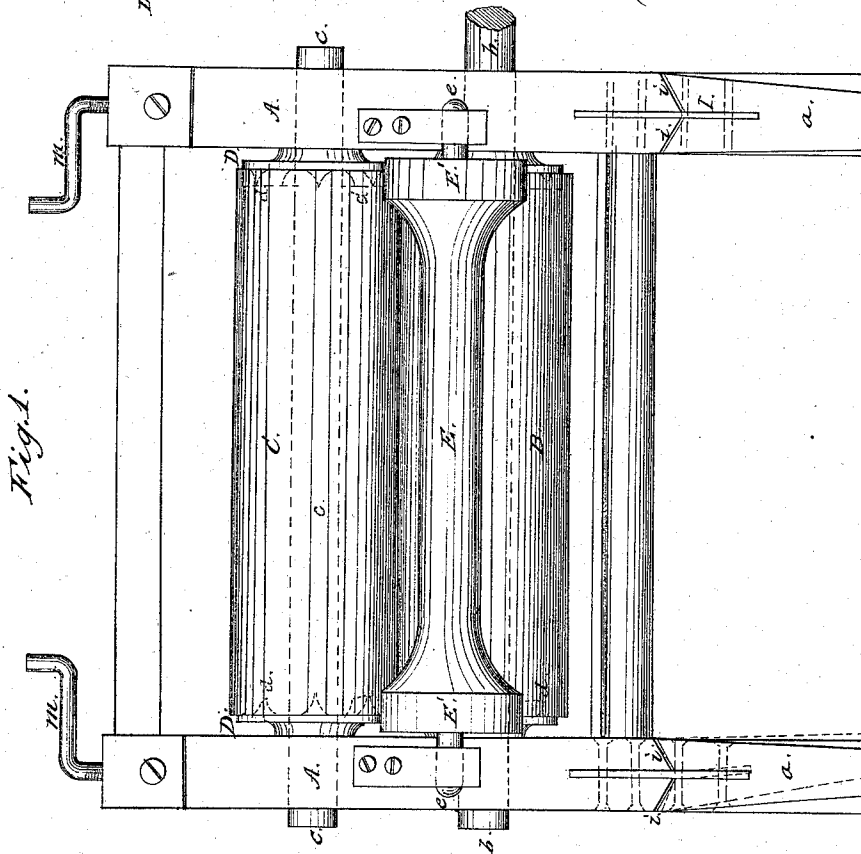


G. B. Griffin

Wringer.

N^o 32,475.

Patented June 4, 1861



Witnesses,
A. B. Regnier
H. B. Sinks.

Inventor,
G. B. Griffin.

UNITED STATES PATENT OFFICE.

GEORGE B. GRIFFIN, OF MADISON, WISCONSIN.

CLOTHES-WRINGER.

Specification of Letters Patent No. 32,475, dated June 4, 1861.

To all whom it may concern:

Be it known that I, GEORGE B. GRIFFIN, of Madison, in the county of Dane and State of Wisconsin, have invented certain new and
5 useful Improvements in Clothes-Wringers; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference
10 marked thereon, in which—

Figure 1 is a front elevation. Fig. 2 is a vertical section of the entire machine, and Fig. 3 is a perspective view of a portion.

Similar letters of reference denote like
15 parts in all the drawings.

My improved wringer is adapted to be fixed upon a tub or upon a conical fluted vessel such as is used in the washing machine generally known as French's patent, pat-
20 ented to Mr. Witsell Jan. 25th 1859.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation by the aid of the drawings.

25 I employ a frame composed of two uprights of wood, A, A, fastened together in the ordinary manner by cross bars. The bases of the uprights A, A, are forked to sit astride of the edge of a tub or similar
30 vessel. In suitable bearings in A, A, are mounted the shafts of two rollers B, C, composed of hollow cylinders of india-rubber inclosing iron shafts or cores b, c. The shaft of the roller C is free to move vertically
35 in slots in the sides of the frame as in other clothes wringing machines, and is held down by springs which are concealed within the uprights A, A, and are governed by screws m, m. To the shaft of one of the rollers B
40 or C a crank (not represented) is to be applied for giving motion to the machine. These parts are all similar in arrangement and effect to the corresponding parts of
45 other and well known clothes wringing machines, which are familiar to mechanics.

In wringing machines of this character as hitherto constructed difficulty has been experienced in keeping the rubber firm upon the shaft, so that it will not turn when pressure is applied. To obviate this difficulty
50 I provide washers, D, of the form shown in Fig. 3, with projecting spurs d, d, arranged radially upon their faces and place them

upon the shafts b, c, driving them tightly against each end of the rubber as shown, and
55 key them fast to the shaft. The points or spurs d, are pressed into the ends of the rubber rollers and prevent them from twisting upon their shafts unless very great force
60 be applied, but in consequence of the little distance to which they project and of their radial position they do not offer any obstacle to prevent the rubber producing its
useful effect upon the clothes, quite up to the
65 washers.

Upon the side of A, in suitable bearings e, I mount a wooden roller, E, of the form represented, with its ends E', E', larger than the middle, which roller turns freely in its
70 bearings. The object of this roller is to so elevate the clothes that the water expressed may fall freely, and also to restrain or guide the clothes laterally, as they are passing into the wringer; and by the use of this friction-
75 less roller in lieu of the stationary guides commonly in use for this purpose to avoid the liability to tear which attends the employment of the latter.

In a conical tub having flutings upon the interior like French's patent washing ma-
80 chine above alluded to, the flutings converge toward the apex of the cone and present a difficulty to the applying of a wringer thereto. To adapt my wringer to such a vessel, I
85 so attach the legs a, a, to the frame A, that they may be bent aside as shown. These legs are attached by means of a thin steel plate I, or a series of such plates laid together to act
90 as one, let into the center of the leg and the frame, and securely fastened in each. These plates are about equal in width to the thickness of the leg, and are so thin as to spring
95 easily in the proper direction, and so broad as to possess the requisite strength in the other direction. A space i, is allowed at the
100 juncture of the leg with the frame, so that the former may be bent aside from the perpendicular by any sufficient force, but it cannot be sprung in any other direction owing
to the resistance offered by the metal strips
105 I to strains in the direction of their edges. In placing the machine upon a conical fluted vessel, the legs stand in a position shown in full black lines, but as it is pressed downward the legs a, a, by the yielding of I adapt
themselves to the taper of the grooves in the

tub or vessel, but hold the machine firm in the direction in which the strain due to operating it is received.

5 K, K, are thin boards placed so as to form a guide or spout to convey the water which is squeezed from the clothes back into the tub.

10 The legs *a*, may be attached to the frame A, by hinges instead of the elastic strips I or by a thinner portion of themselves so as to perform the same office, but I prefer the construction shown.

15 The advantages due to the use of my roller E, E', in combination with the rubber rollers B, C, are that the clothes are properly guided into the rollers B, C, near their centers without liability to injury by rubbing against any fixed parts.

20 The advantages due to my yielding leg or legs *a*, are that the legs are thereby adapted to be fitted into the grooves or flutings of

a conical fluted vessel by adapting themselves to the converging position of the flutings.

Having now fully described my invention 25 what I claim as new therein and desire to secure by Letters Patent is—

1. The employment in wringing machines of the spool shaped guide rollers E, E', arranged to operate in combination with the 30 soft surface pressure rollers B, C, substantially in the manner and for the purpose herein set forth.

2. The employment on clothes wringing machines of the yielding leg or legs *a*, adapted to yield in a plane parallel to the axes of 35 the rollers, substantially in the manner and for the purpose herein set forth.

G. B. GRIFFIN.

Witnesses:

A. B. REGNIER,
H. B. SINKS.