

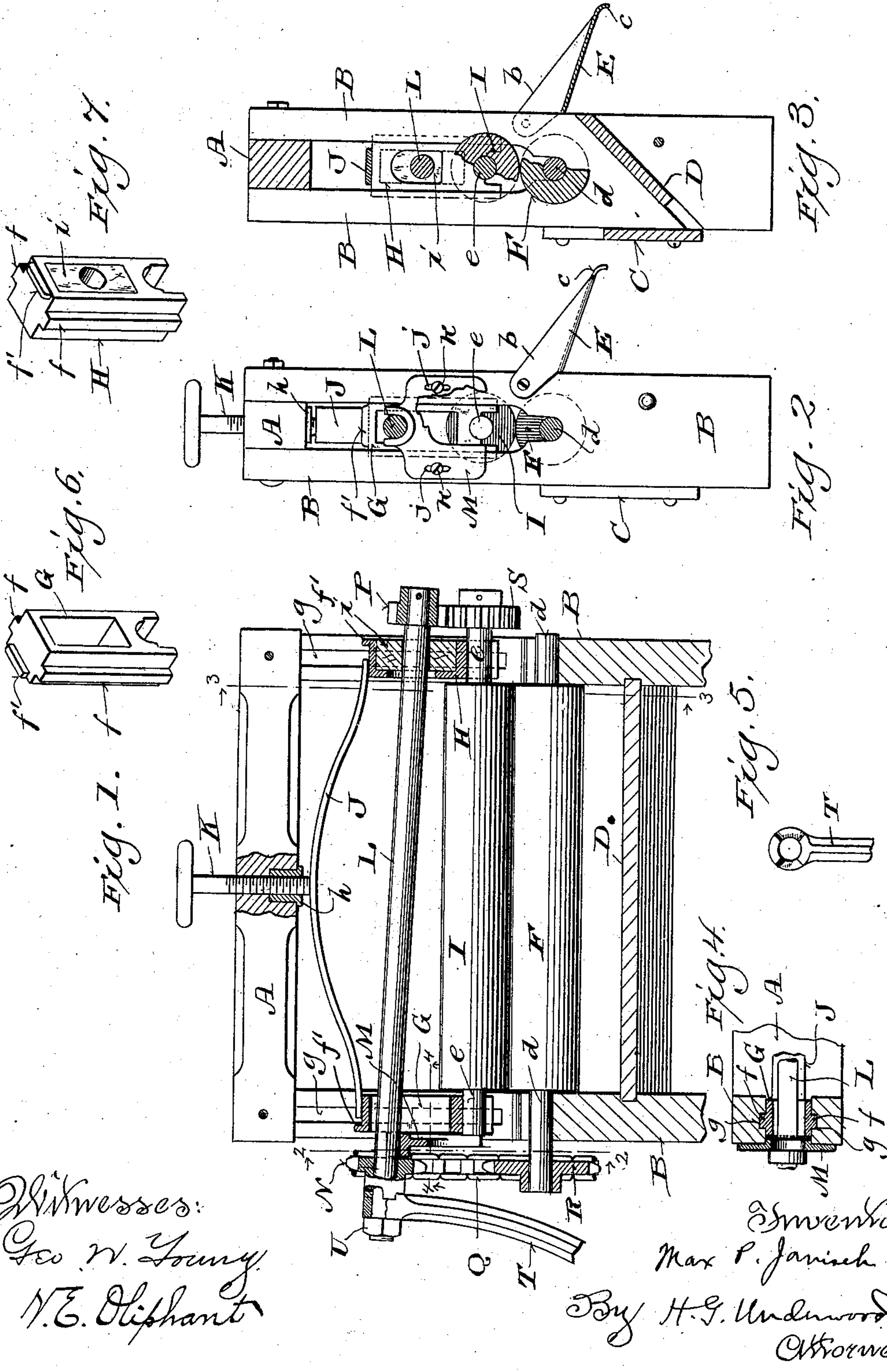
No. 688,418.

Patented Dec. 10, 1901.

M. P. JANISCH.  
CLOTHES WRINGER.

(Application filed Mar. 22, 1900.)

(No Model.)



Witnesses:  
Geo. W. Young  
N. E. Oliphant

Inventor  
Max P. Janisch  
By H. G. Underwood  
Attorney



# UNITED STATES PATENT OFFICE.

MAX P. JANISCH, OF WAUPUN, WISCONSIN, ASSIGNOR TO THE AUTOMATIC WRINGER COMPANY, OF WAUPUN, WISCONSIN.

## CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 688,418, dated December 10, 1901.

Application filed March 22, 1900. Serial No. 9,684. (No model.)

*To all whom it may concern:*

Be it known that I, MAX P. JANISCH, a citizen of the United States, and a resident of Waupun, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Clothes-Wringers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to simplify and cheapen the manufacture of clothes-wringers, particularly those in which the upper rolls under pressure automatically adjust themselves to varying thickness of material operated upon without bind or increase of friction in the gearing, said invention consisting in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a partly sectional elevation of a portion of my improved clothes-wringer having parts thereof broken; Fig. 2, an end view of the same, partly in section, on the plane indicated by line 2 2 in the preceding figure; Fig. 3, a sectional view indicated by line 3 3 in the first figure; Fig. 4, a detail horizontal section indicated by line 4 4 in said first figure; Fig. 5, a detail view of a portion of the power-crank, and Figs. 6 and 7 detail perspective views of bearing-boxes constituting parts of the wringer.

Referring by letter to the drawings, A indicates the top bar; B, each of a pair of longitudinally-slotted standards; C, the back board, and D the watershed that are combined to form the frame of my improved clothes-wringer. In pivotal connection with the frame-standards are upturned ear ends *b* of a guide-plate E, this guide-plate being a single piece of sheet metal, preferably galvanized iron. By a downward bend *c* of its outer edge the guide-plate is stiffened and movement of the clothes thereon facilitated. The guide-plate being of metal, it will not warp or crack.

The vertical slots in the frame-standards are shaped at their lower ends to provide bearing-spaces for the journals *d* of the lower wringer-roll F, and in sliding engagement with said slots are metallic shells G H, the

lower ends of which are shaped to form bearings for the journals *e* of the upper wringer-roll I, said shells being each provided with lateral longitudinal ribs *f*, that engage guide-grooves *g*, formed in said standards. Each of the shells is provided with an upper outer stop-lug *f'*, and surmounting said shells, with its ends in opposition to their lugs, is a semi-elliptic spring J, the tension of which is regulated by a screw K, for which a bearing *h* is provided in the top bar of the wringer-frame.

Set in the shell H is a hardwood bearing-block *i* for the drive-shaft L of the wringer, and another bearing for the shaft constitutes part of a metallic bracket M in connection with the frame-standard in which shell G has its play. The bracket is provided with vertical slots *j*, and by means of set-screws *k* engaging the slots and adjacent frame-standard said bracket is secured in adjusted position.

Fast on shaft L, adjacent to bracket M, is a sprocket-pinion N, and a spur-pinion P is fast on the farther end of said shaft. The sprocket-pinion is connected by a link belt Q with a sprocket-wheel R, fast on a journal of the lower wringer-roll, and a spur-wheel S, fast on a journal of the upper wringer-roll, meshes with the aforesaid spur-pinion. By adjustment of the bracket M the slack of the link belt Q is regulated.

The sprocket-pinion N is provided with a hub that is notched to have match fit with a correspondingly-notched end of a crank T, slipped on shaft L, their engagement being maintained by a set-nut U, for which the shaft is provided with a thread. However, this detachable clutch connection of the crank and drive-shaft may be varied in practice. By turning the crank rotary motion is communicated to the wringer-rolls by means of the gearing above specified, and material being run between said rolls the upper one is lifted against a predetermined degree of spring-pressure, regulated at will by means of the tension-screw herein set forth. The shells G H move up and down with the upper wringer-roll, clearance-space for shaft L being provided in the first of said shells, and as the spur-gearing rises and falls with said roll there is no bind or increase of friction in any



of the gearing incidental to automatic adjustment of the aforesaid roll with respect to thickness of material operated upon, the normal inclination of said shaft being such that  
5 it moves toward horizontal position as said material increases in thickness, whereby tendency of the spur-gear to cramp under such conditions is obviated.

Having thus described my invention, what  
10 I claim as new, and desire to secure by Letters Patent, is—

1. A clothes-wringer comprising a drive-shaft having link-belt and sprocket-gear connection with one of the rolls and spur-gear  
15 connection with the other roll, one end of the drive-shaft and a roll in gear therewith being mounted in stationary bearings of which the one for said shaft is adjustable to regulate slack of the link belt, the bearings for the  
20 other end of said shaft and the other roll being vertically movable, a tension-spring opposing upward movement of the latter roll, and means for regulating pressure of the spring.

25 2. A clothes-wringer having vertically-slotted frame-standards provided with guide-

grooves, shells loose in the standard-slots and provided with ribs engaging said guide-grooves, a semi-elliptic spring under tension on the shells, the lower wringer-roll journaled  
30 in the frame-standards, the upper wringer-roll having its journals in bearing against the lower ends of said shells, a block set in one of the shells, a bracket in vertically-adjustable connection with the frame-standard far-  
35 thest from the block, a drive-shaft for which said block and bracket constitute bearings, clearance-space for the shaft being had in the shell nearest the aforesaid bracket, gearing connecting opposite ends of said shaft with  
40 a lower-roll journal and an upper-roll journal, and means for rotating the aforesaid shaft.

In testimony that I claim the foregoing I have hereunto set my hand, at Waupun, in  
45 the county of Fond du Lac and State of Wisconsin, in the presence of two witnesses.

MAX P. JANISCH.

Witnesses:

CHAS. DICKELMANN,  
R. W. HANNY.