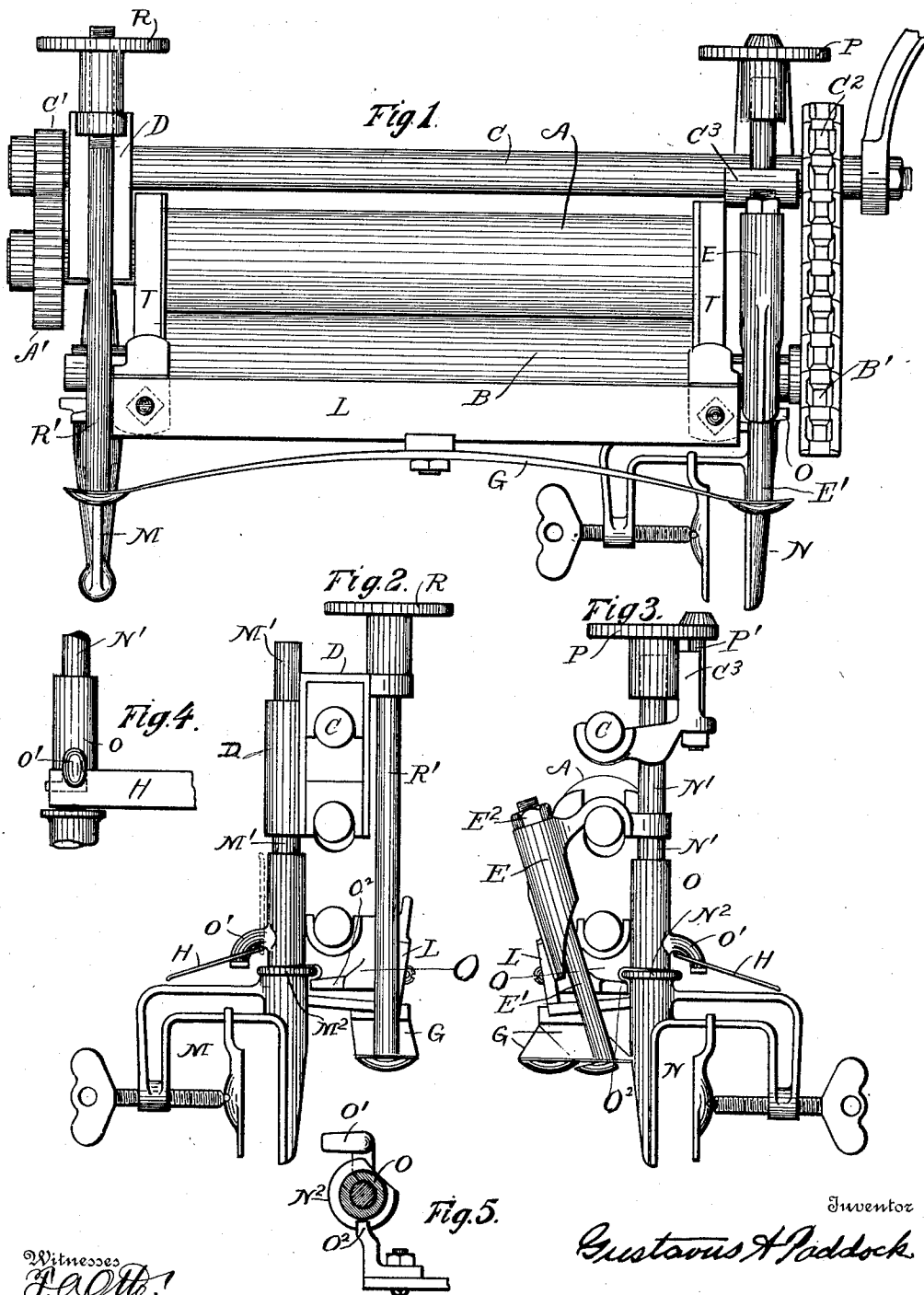


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CLOTHES WRINGER.
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1,007,966.

Patented Nov. 7, 1911.



Witnesses
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CLOTHES-WRINGER.

1,007,966.

Specification of Letters Patent.

Patented Nov. 7, 1911.

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To all whom it may concern:

Be it known that I, GUSTAVUS A. PADDOCK, a citizen of the United States, residing at Beaver Dam, in the county of Dodge and State of Wisconsin, have invented a new and useful Improvement in Clothes-Wringers, of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1, is a front view of a wringer constructed as proposed by my invention, Fig. 2, a view of the left hand end thereof, Fig. 3, a view of the right hand or crank end, Fig. 4, shows a section of the folding clothes apron and a hinge thereof, Fig. 5, shows how the clamps are secured to the frame, the view being an inverted one.

A is the upper roll, B the lower roll, C a separate drive shaft, provided at one end with a spur pinion, C¹, and at the other end with a sprocket pinion, C², and a crank.

L is a cross bar of angle steel to which lower roll shaft bearings, O, O, are bolted. Tub clamps, M, and N, are integral with rods, M¹, and N¹, and also with flanges, M², and N². Said rods are pivoted in sleeves integral with the bearings O O. Lips, O², O², also integral with said bearings, and depending therefrom, lie under said flanges, and thus hold the clamps in place.

The spur pinion C¹ is in mesh with a spur wheel, A¹, on the upper roll shaft, a slide, D, which is supported on the upright shank or rod, M¹, of the clamp M, furnishing bearing for that end of said upper roll shaft and the drive shaft.

P is a hand rest, thimble shaped inside, pivoted on the upright standard, N¹, of the clamp N. A shaft bearing, C³, is adjustably suspended from said hand rest by a vertical bolt P¹, and supports that end of the drive shaft, the standard, N¹, passing through an opening in said bearing. The sprocket pinion, C², is connected with a sprocket wheel, B¹, on the lower roll shaft by a link belt. A spring, G, bears against the center of the bar L, (a small casting between them holding the spring in place), and a bolt, R¹, is passed through one end of the spring and through an aperture at the front of the slide, D, and is secured by a screw threaded nut, R, said nut being large at the top so as to form a convenient hand rest. A casting, E, with a depending sleeve, furnishes bearing for the crank end of the upper roll shaft,

and a bolt, E¹, runs through that end of the spring and through said sleeve, being secured by a nut, E². Guards, F, are applied to the ends of the rolls to prevent the clothes passing beyond the ends of the rolls.

A clothes apron, H, has an opening in each end, and hooks, O¹, integral with the lower roll shaft bearings, and passing through said openings, form hinges to the apron, their lower ends being turned sideways to prevent the apron slipping off. It will be seen that the bolt in the slide, D, is substantially parallel with the upright rod, or standard, of the clamp M, thus bringing that end of the spring far in front of the roll shaft while the bolt, E¹, stands at an angle, thus bringing that end of the spring almost directly under the roll shaft, so that the spring lies at an angle to the rolls. A common six sided nut is used on the bolt, E. This can be set at about the proper place for use and there stay permanently, the tightening and loosening of the spring being done by turning the nut, R.

By this construction, I am enabled to combine, in one wringer, perfect adjustment of the spring, and at the same time prevent the side friction of the bearings of the spur wheel end. For, if the spring works directly on the center of both of the sliding bearings, as in wringers formerly built with this style of gear, the upper end of the slide bears heavily rearward, while the lower end presses correspondingly forward. The vertical bolt in the bearing at the crank end of the drive shaft, gives opportunity for the most convenient and perfect adjustment when the chain becomes loose, and the hand rest answers a twofold purpose, the opening in its center being thimble shaped so that it rests squarely on the top of the standard N¹. I lay no claim to the style of clothes apron, or the tub clamps shown in this application, as they form part of the subject matter of another application for Letters Patent filed by me on Feby. 24, 1908 and numbered 417,519.

I claim as my invention:

1. In a clothes wringer, a lower roll shaft in stationary bearings, an upright rod adapted to be rigidly secured to the tub, an upper roll shaft in sliding bearings, one of which is mounted on said rod, a hand rest resting on the top end of said rod, a shaft bearing adjustably suspended from said hand rest,

and a separate drive shaft adapted to drive both rolls, one end thereof resting in said adjustably supported bearing.

2. A clothes wringer comprising an upright standard secured to the wringer frame, a hand rest secured at the top thereof, a shaft bearing secured to said hand rest, and a separate drive shaft, one end of which is connected with the upper roll shaft by spur wheel gear, and the opposite end with the lower roll shaft by sprocket wheel and link belt gear and resting in said bearing, the standard and hand rest both being in rear of the rolls.

3. A clothes wringer comprising a tub clamp pivotally secured to the wringer frame, a rod integral with said clamp, a hand rest pivoted on the top of said rod, a shaft bearing adjustably suspended from said hand rest, and a separate drive shaft adapted to drive both rolls, one end thereof resting in said bearing.

4. A clothes wringer comprising a lower roll shaft in stationary bearings, an upper roll shaft in bearings adapted to slide vertically, a separate drive shaft connected at one end to the lower roll shaft by link belt and sprocket wheel gear, and at the opposite end to the upper roll shaft by spur wheel gear, and a spring operatively connected with both upper roll shaft bearings, and adapted to bring downward pressure on the central part of the bearing next the sprocket gear, and on the opposite bearing at a point at one side of its center, so as to counteract the twisting pressure caused by turning the wringer rolls.

5. A clothes wringer comprising a lower roll shaft in stationary bearings an upper roll shaft in movable bearings, an upright rod connected to a lower roll shaft bearing

and reaching above the upper roll shaft, a shaft bearing adjustably supported on said rod, its weight resting upon the top end thereof, and a separate drive shaft, one end thereof resting in said bearing and being connected with the lower roll shaft by sprocket wheel and link belt gear, its opposite end being connected with the upper roll shaft by spur wheel gear.

6. A clothes wringer comprising a lower roll shaft in stationary bearings which each have an upright rod connected to it, an upper roll shaft in bearings supplied with openings through which said rods pass, a shaft bearing adjustably supported on one of said rods above the upper roll shaft bearing, a separate drive shaft, one end thereof resting in said bearing and being connected with the lower roll shaft by sprocket wheel and link belt gear, the opposite end thereof being connected with the upper roll shaft by spur wheel gear, and a spring lying below the rolls and operatively connected with both upper roll shaft bearings.

7. A clothes wringer comprising a lower roll shaft in bearings which are rigidly secured to a connecting cross bar, a separate drive shaft adapted to drive both rolls, one end thereof resting in a slide in which one end of the upper roll shaft has bearing, and a spring located below said cross bar and frontward from the roll shafts, and operatively connected with both the upper roll shaft bearings, pressure being conveyed to said slide by means of a bolt standing in front of the roll shafts.

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Witnesses:

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