

T. E. McDONALD.
Clothes-Wringers.

No. 152,665.

Patented June 30, 1874.

Fig. 3, a.



Fig. 1.

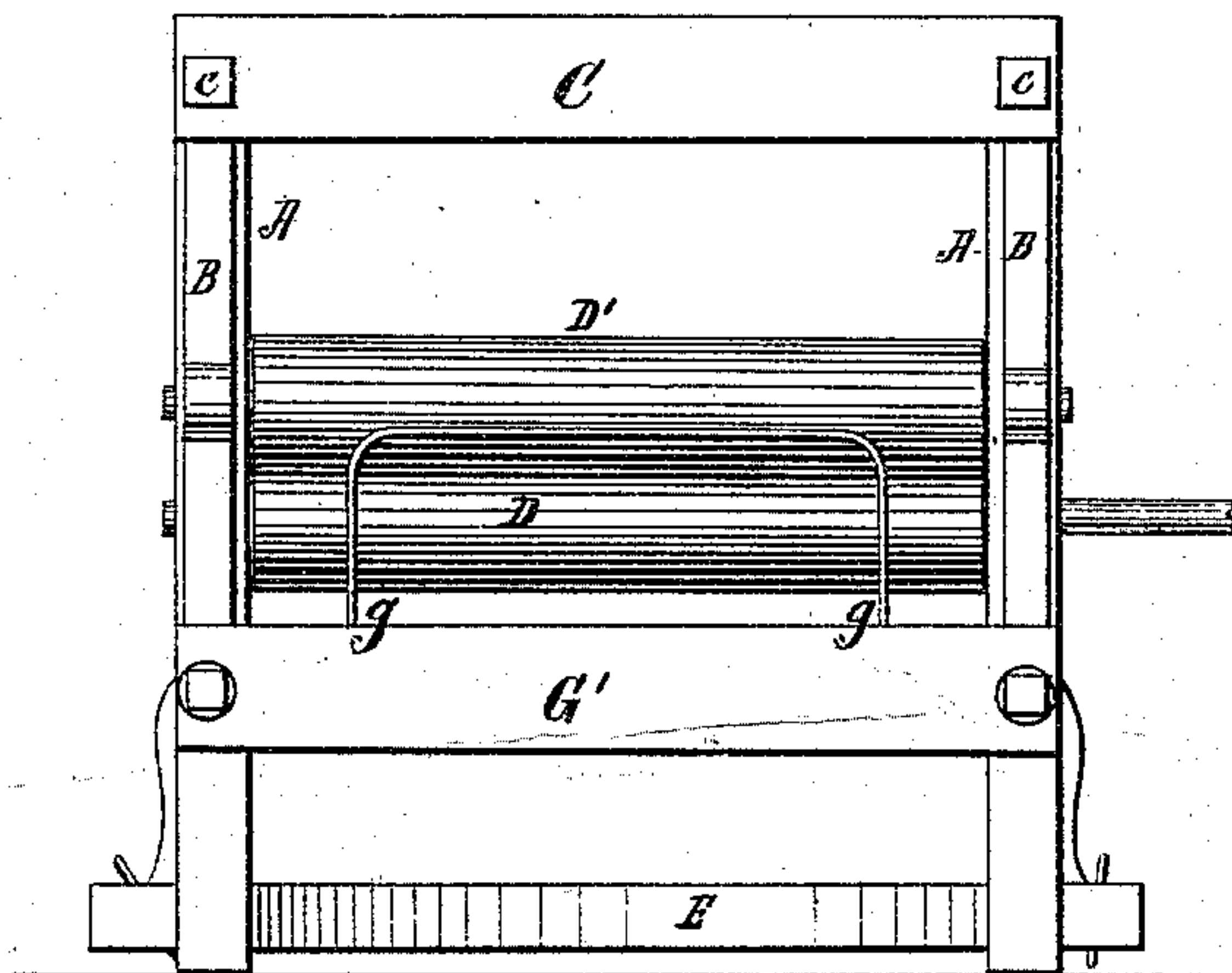


Fig. 2.

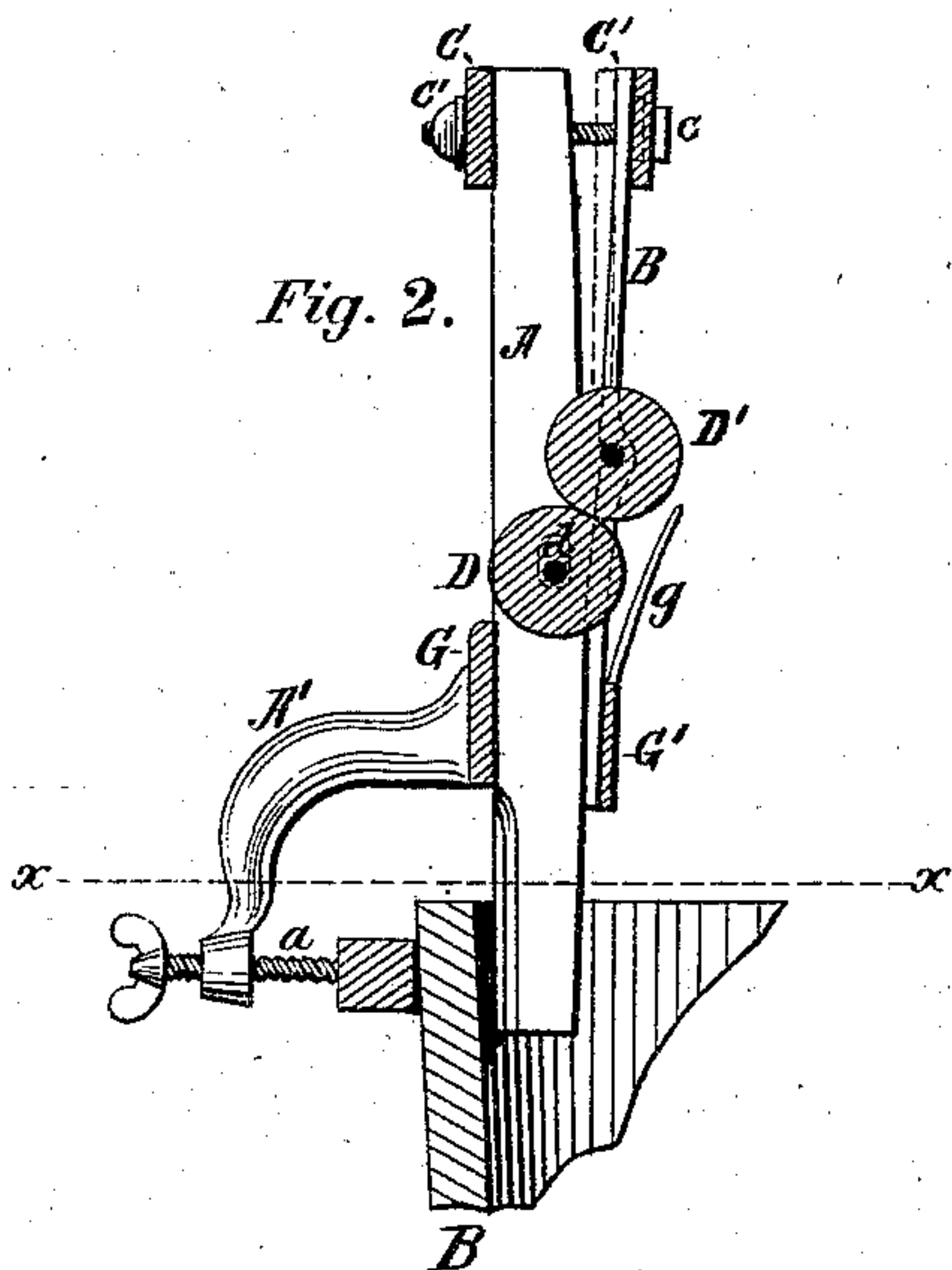
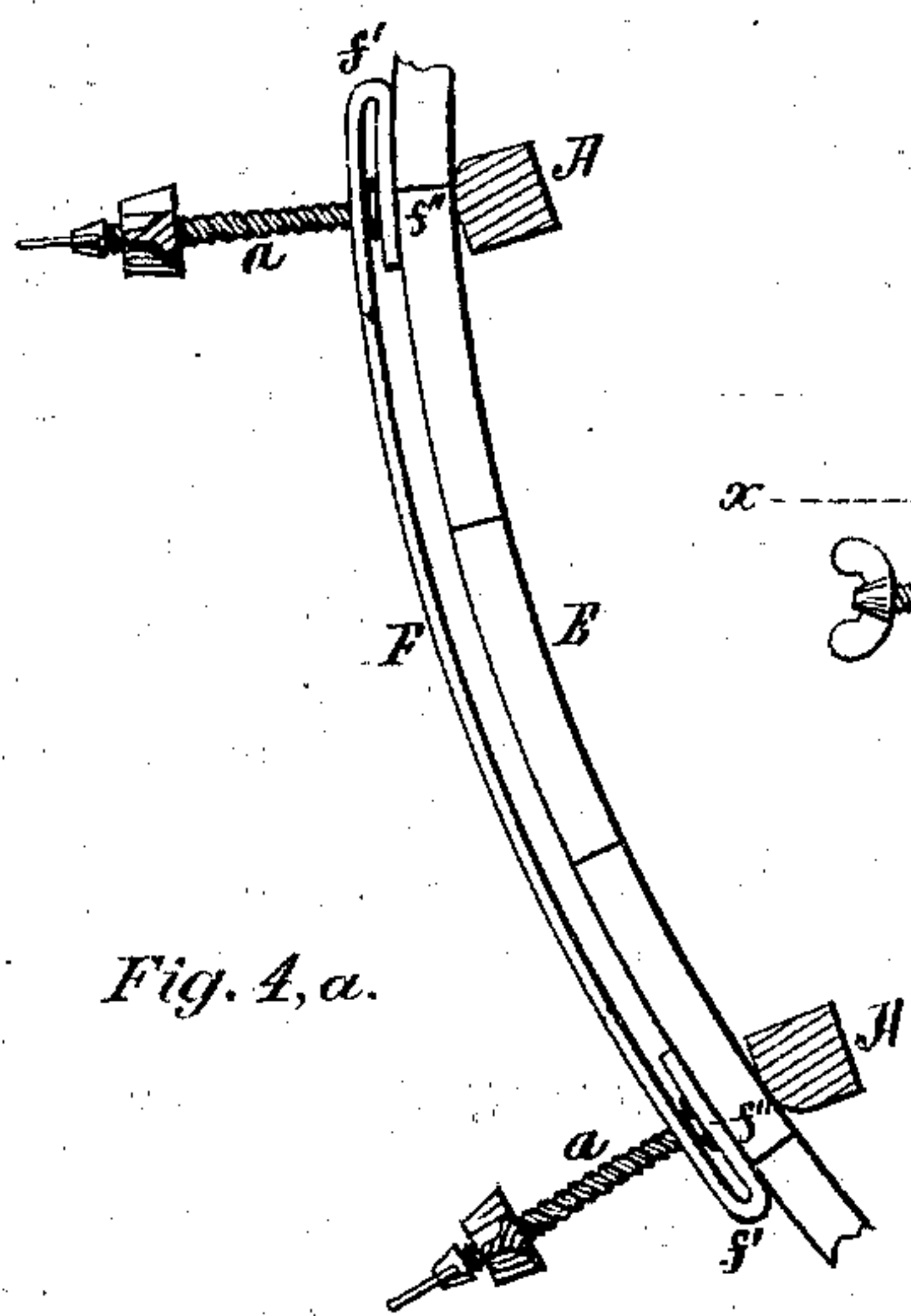


Fig. 4, a.



Attest.
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THOMAS E. McDONALD, OF NEW BRUNSWICK, NEW JERSEY.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 152,665, dated June 20, 1874; application filed November 11, 1873.

To all whom it may concern:

Be it known that I, THOMAS E. McDONALD, of New Brunswick, in the county of Middlesex, in the State of New Jersey, have made certain Improvements in Clothes-Wringers, of which the following is a specification:

My invention relates to clothes-wringers; and consists in the construction of a device whereby the wringer is securely clamped to the tub or vessel that contains the clothes.

In the drawings, Figure 1 is a side view of the wringer; Fig. 2, an end view of the same. Fig. 3^a is a front view of a metal spring clamp-plate. Fig. 4^a is a top view, showing how the metal clamp-plate is employed to clamp the wringer to the tub.

A A represent the fixed or unyielding posts of the frame or supports of the wringer. B B are metal springs bolted fast at their lower ends to the posts A, and each one has a bearing, that is open on its inner side, to carry, and in which the spindle of the upper roller freely revolves. C is a cross-tie at the upper end of posts A, and on the outside thereof. C' is a similar tie on the outside of the upper ends of the metal spring-supports B. *c c* are screw-bolts passing transversely through the upper ends of ties C and C', and through the posts A and metal supports B. *c' c'* are conical-shaped screw-nuts that screw onto the screw-bolts *c*, and operate to force the spring-supports B toward the fixed posts A, and consequently forces the wringer-rollers together whenever it is desired to have more pressure upon them, and by turning them back the yielding supports B will force the rollers apart. D is the lower wringer-roll, journaled and working in slotted bearings *d* in fixed posts A. D' is the upper wringer-roll, journaled and working in open bearings in the metal spring-supports B. G is the lower tie on the fixed posts A, and G' is the lower tie on the lower ends of the spring-supports B, and both ties G and G' are bolted fast by a screw-bolt that is attached to the clamp-arm A', and passes through the ties G and G', fixed posts A, and metal supports B, making them all fast together where the screw-bolt passes through them. *g* is a bent

metal guide, made fast in the upper edge of the lower tie G', and extends upward from the tie, so that its lower side will be above the top of the lower wringer-roll, and thereby prevent any of the clothes that are passing through the wringer from going above the upper roll, and bends outwardly to be parallel with the obliquity of the rollers D and D', while the lower tie G' acts to guide and prevent the clothes from passing under the lower roller. This guide *g* is flexible or yielding, for the purpose of giving way whenever twists in or enlargement of the quantity of clothes passing through the wringer-rolls, and thus prevent injury to the clothes, as there would be if the guides were rigid. E is the tub or vessel to which the wringer is attached, and F is the metal spring-clamp, with slots *f f* near each end, through which go the clamp-screws *a*, and outside of these slots the clamp ends bend inward at *f'*, to be parallel with the body of the clamp spring, but at a little distance therefrom, to admit a pad or button, *f''*, to freely revolve between the body of the clamp and the return ends. The object of this construction is, first, to hold the spring-clamp upon the ends of the clamp-screws *a*, and have the force of the screw applied to the return ends; and, second, to have the inwardly-bent ends of the clamp bear upon the tub or vessel instead of the buttons on the ends of the clamping-screw, as is usually the case, thus preventing the usual indentations made by the buttons into the wood of the tub, which in time causes considerable wearing away of the tub.

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

The clamping metal spring F, having the slots *f f* and inwardly-bent ends, against which the clamping-screw acts in clamping the wringer to the tub, and such bent ends bear upon the tub, in the manner substantially as described.

THOMAS E. McDONALD.

Witnesses:

JOSEPH TREAT,
GEORGE McDONALD.