

(No Model.)

W. H. HOBBS,
WASHING MACHINE.

No. 428,911.

Patented May 27, 1890.

Fig. 1.

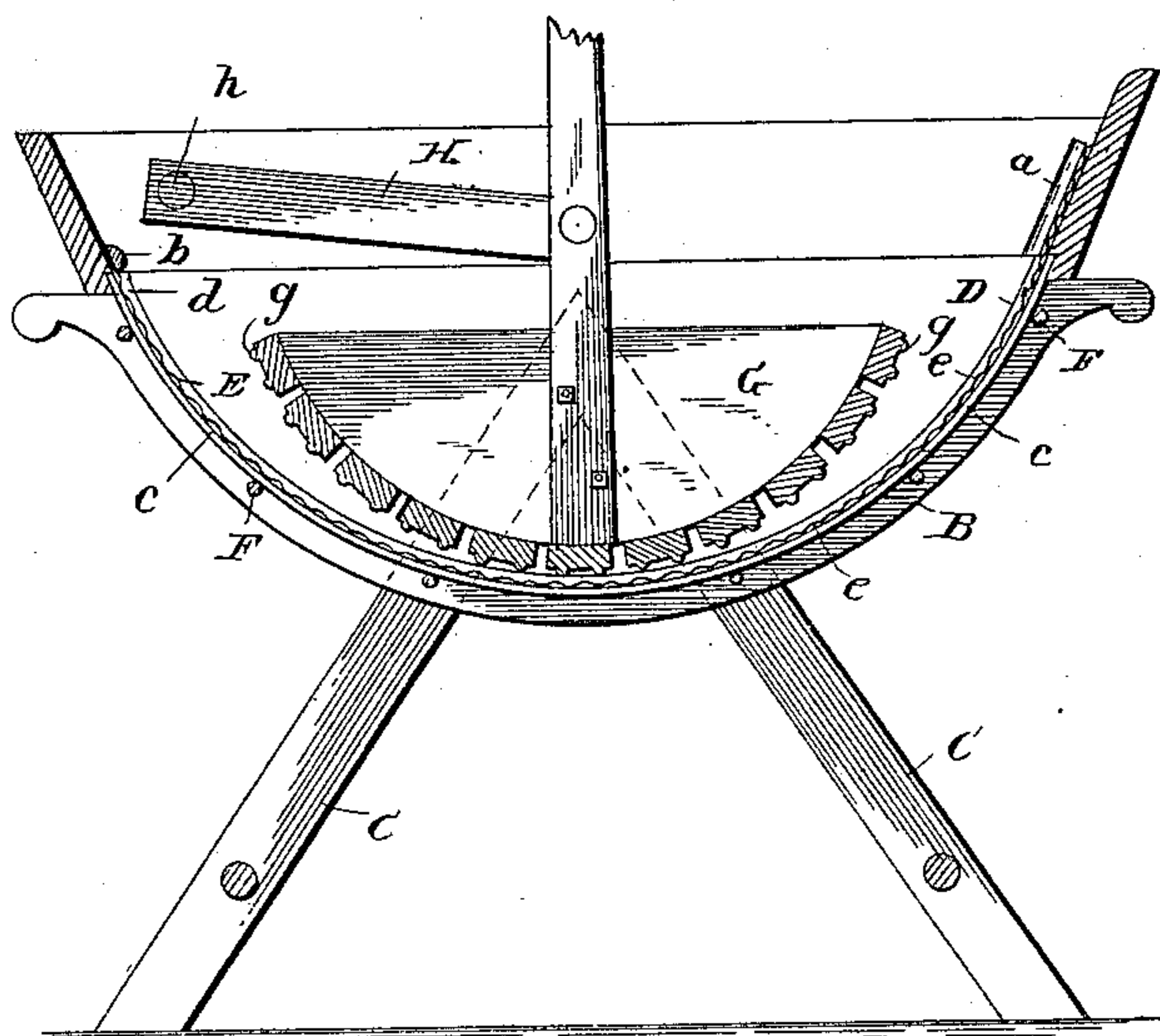


Fig. 2.

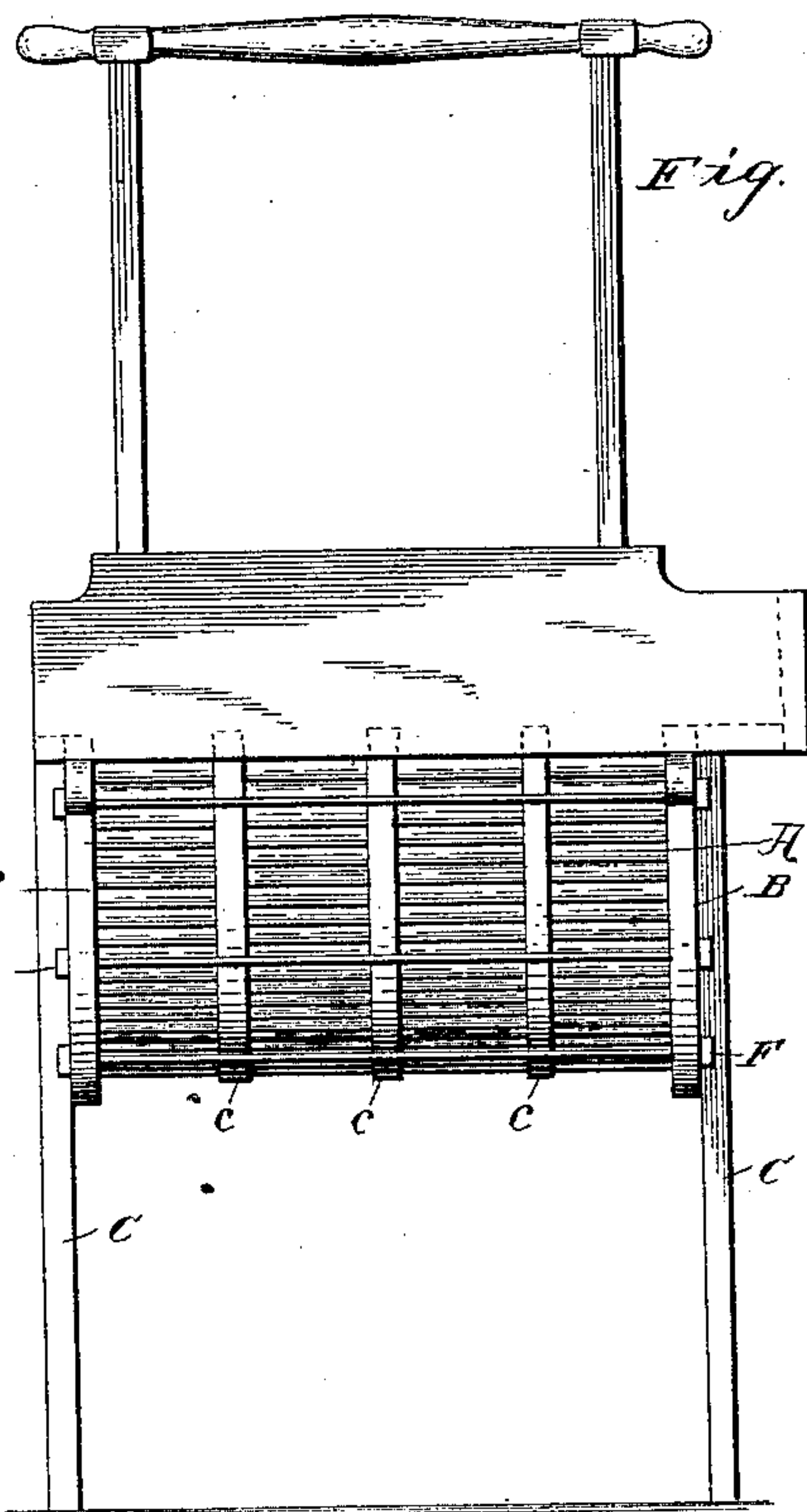


Fig. 4.



Fig. 3.

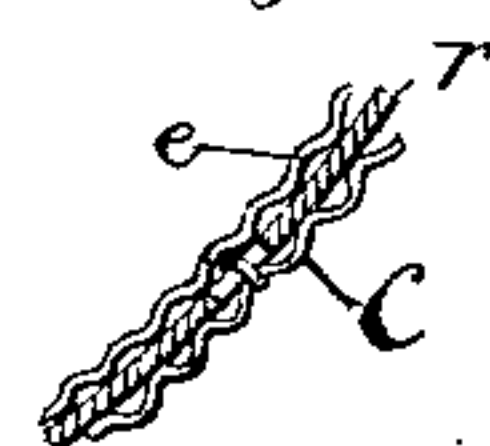
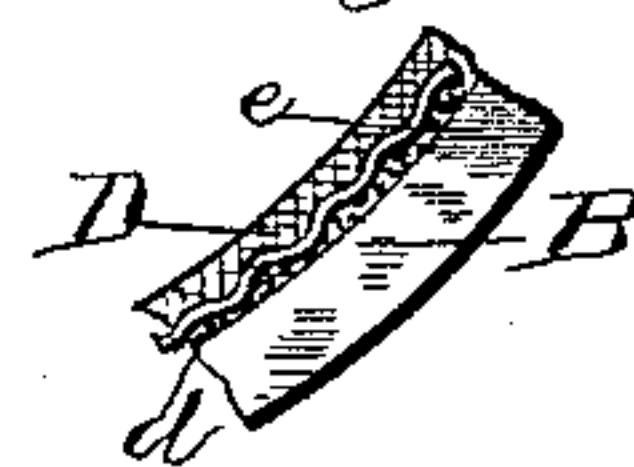


Fig. 5.



Witnesses
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WILLIAM H. HOBBS, OF BARNESVILLE, OHIO.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 428,911, dated May 27, 1890.

Application filed June 5, 1888. Serial No. 276,107. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HOBBS, a citizen of the United States, residing at Barnesville, in the county of Belmont, State of Ohio, have invented a certain new and useful Improvement in Washing-Machines; of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of my improved washing-machine. Fig. 2 is a front elevation of the same. Fig. 3 is a view of a modified form of elastic strap or truss for supporting the metallic bottom of the washer. Fig. 4 is a detail view showing the manner in which the edges of the metallic bottom may be corrugated or serrated to more firmly embed them in the bearings at the end of the edges of the metallic bottom. Fig. 5 is an enlarged view of a portion of one of the side pieces, showing clearly the packing and metallic bottom located in the grooves thereof.

The object of my invention is to construct a washing-machine the bottom of which shall be sufficiently smooth and elastic to allow the clothes to be washed to move freely along its serrated surface, and this I accomplish by supporting the bottom by elastic straps and by using a wooden rubber mounted on a pivotal bearing in such a manner that its vibrations will be above the curved corrugated surface of the metallic bottom. The clothes will adhere to the wooden rubber with greater tenacity than to the metallic bottom, and as a natural consequence the clothes will be gently rubbed and effectually washed, and yet the rubbing will not be so hard as to injure the fabric, as will be the case if the rubber and bottom were both of wood.

Another object of my invention is to construct a washing-machine with a metallic bottom, and have this bottom so mounted and supported that the contraction and expansion caused by varying degrees of temperature and humidity will in no way injure, twist, or dislocate any of the parts of the structure; and to this end it consists in construct-

ing the washing-machine with a metallic bottom supported at its edges by two sides, which sides are in turn slitted and held together by transverse metallic tie-rods. The bottom proper is to be supported by strips of strap-iron which extend along longitudinally beneath the bottom and are secured at their ends to the main frame of the washer.

Having stated in general terms the objects of my invention and having outlined the construction of the same, I will now proceed to give a detailed description of the various parts, referring by reference-letters to the several elements which enter into the make-up of the washing-machine.

Like letters refer to the same parts throughout the accompanying specification.

A tub or receptacle A, having semi-circular side pieces B B, is mounted upon legs C C, which are secured to the side pieces B B of the washing-machine proper. Each of the side pieces B B is provided with a groove D, into which groove is inserted a suitable packing material *d*, which is to be made of cork or any other suitable packing material. This packing material is to form a bearing for the metallic bottom E, which bottom is to be made of tin, copper, zinc, galvanized iron, or any other suitable material, and it is to be provided with corrugations *e e*. The bottom E is then mounted within the grooves D D, and the two side pieces B B are bolted together by means of transverse tie-rods F F. The ends of the bottom E are to be secured to the ends of the washing-machine or receptacle A by means of half-round strips *a* and *b*, respectively. Beneath the bottom E and extending longitudinally its entire length are strap-irons *c c*, which support the metallic bottom against accidental displacement from the top. When it is desired to have these strap-irons elastic, they may be made serpentine in shape, or may be slightly corrugated, as shown in Fig. 3. If desirable, a secondary bearing-strip *r* may be secured to the top of the strap between it and the bottom proper.

In Fig. 4 I show the bottom E, having its edge notched or split, forming tongues *s s*, which may be slightly bent at an angle to the bottom itself in such a manner that the forcing of the side pieces B B toward each other,

after the bottom has been put into the receptacle, will tend to spread the tongues *s s* and embed them firmly in the packing material *d*.

5 The rubber *G* is provided with semicircular ribs *g g*, and is pivotally secured to a link *H*, which in turn is pivotally secured to the washing-machine at *h*. From the nature of the case it will be readily understood that the clothing will adhere to the rubber to an extent sufficient to facilitate the rubbing of them enough to cleanse them thoroughly. A washing-machine constructed on this plan will not become warped and distorted by varying degrees of moisture and dryness or
15 of heat and cold. The bottom will afford a comparatively smooth rubbing-surface and yet it will not tear the clothing. The packing in the grooves *D* will serve as a cushioning for the bottom proper and will allow it to contract and expand within a reasonable limit sufficient to accommodate the ordinary contraction and expansion of a washing-machine from the causes hereinbefore mentioned without any perceptible damage to the machine.
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Having now described the objects, uses, and advantages of my device, what I desire

to secure by Letters Patent, and what I therefore claim, is—

1. In a washing-machine of the character described, the side pieces having grooves provided with packing material located therein, in combination with a bottom having slitted edges forming tongues *s s*, which are adapted to be embedded into the packing material, and screw-threaded tie-rods provided with nuts, substantially as described. 30 35

2. In a washing-machine of the character described, a main receptacle provided with suitable tie-rods and having side pieces provided with grooves and packing material in said grooves, in combination with a metallic bottom secured within said grooves, said bottom having slitted edges forming tongues *s s*, and an elastic corrugated strap-iron extending along beneath the bottom and supporting it, substantially as described. 40 45

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM H. HOBBS.

Witnesses:

W. F. SMITH,
E. T. PETTY.