

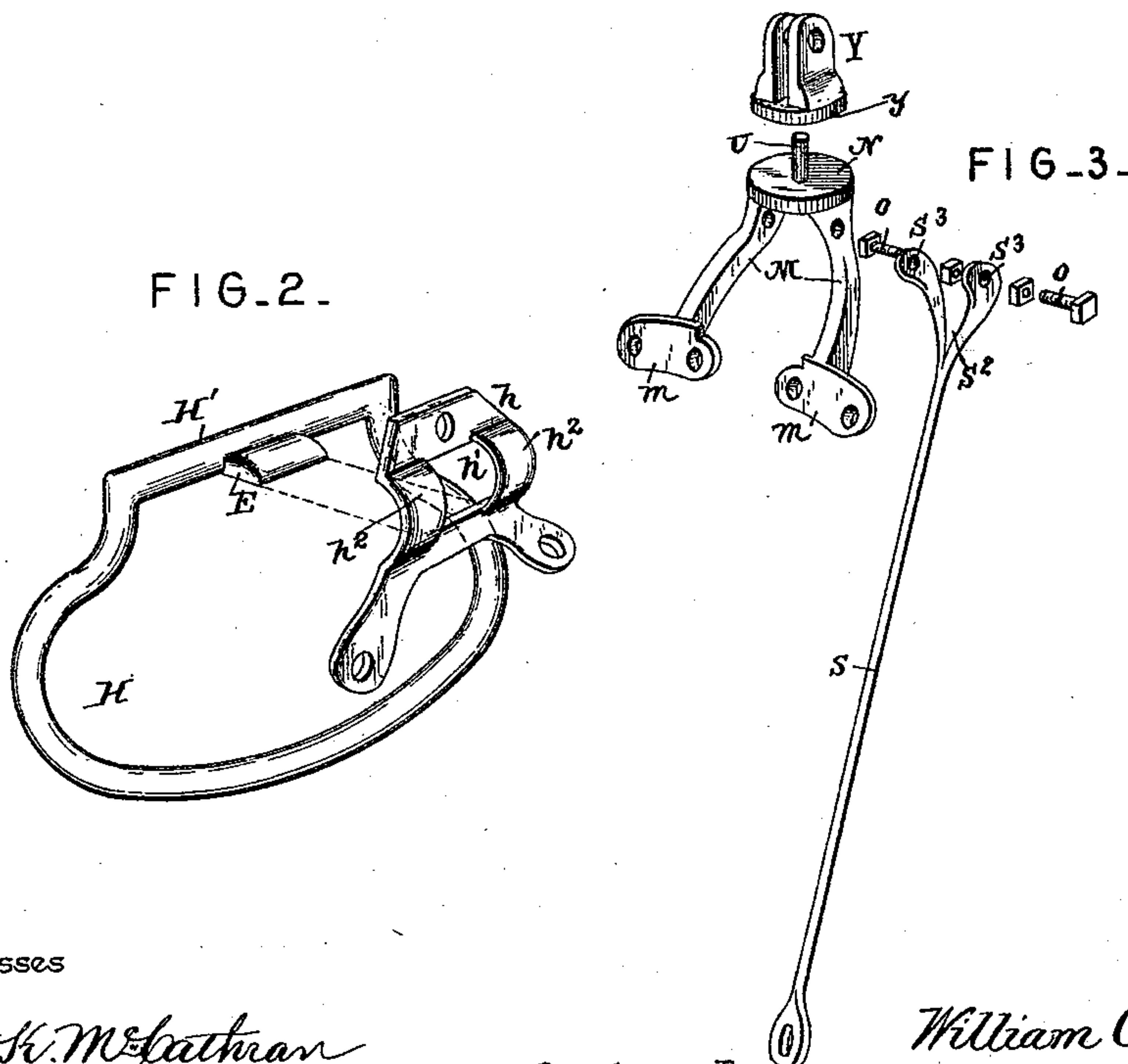
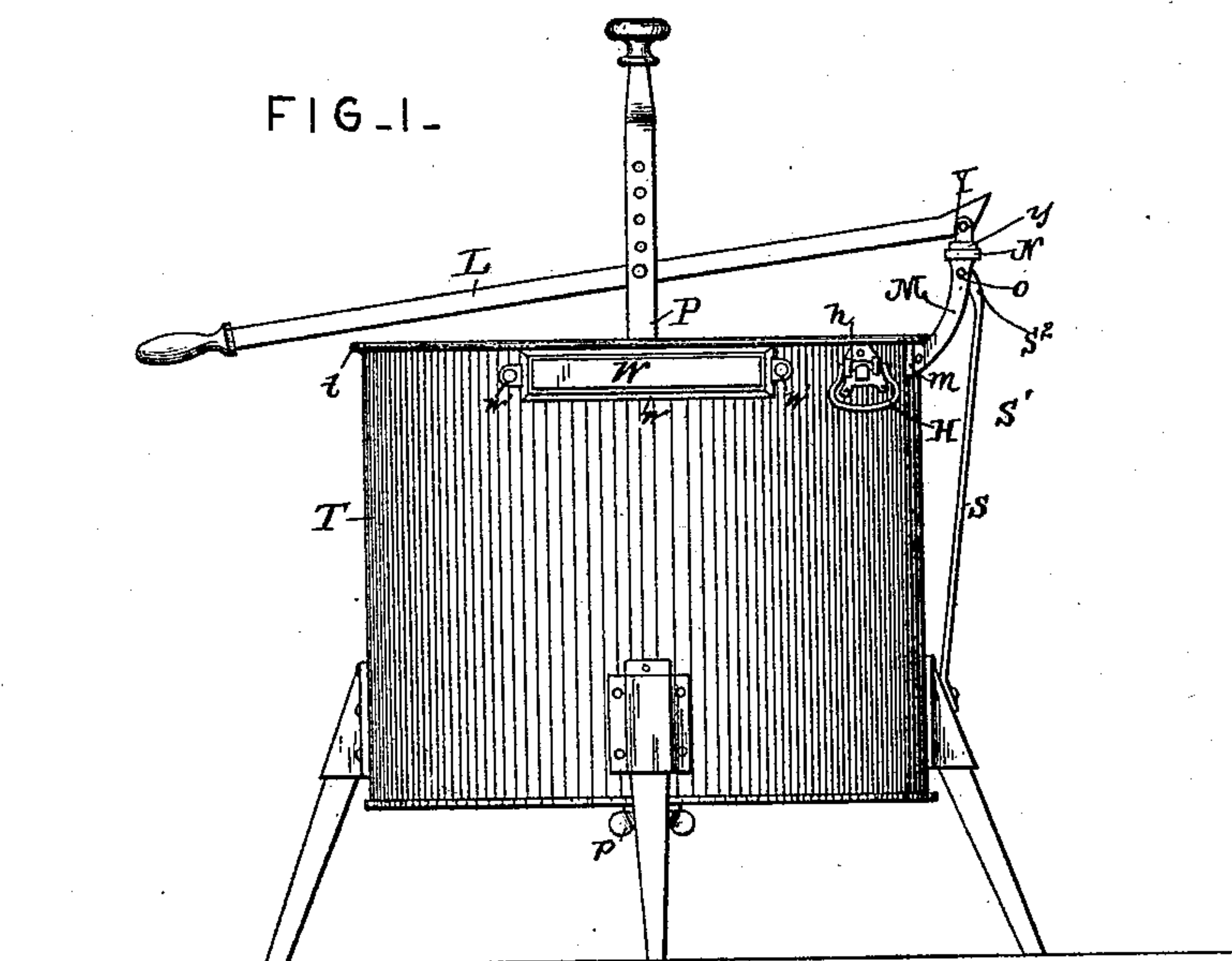
(No Model.)

2 Sheets—Sheet 1

W. G. BOSTON.  
WASHING MACHINE.

No. 454,842.

Patented June 30, 1891.



Witnesses

Jas. H. McLaughlin

N. L. Collamer

Inventor

William G. Boston

By his Attorneys,

Chas Snow Geo

(No Model.)

2 Sheets—Sheet 2

W. G. BOSTON.  
WASHING MACHINE.

No. 454,842.

Patented June 30, 1891.

FIG-5-

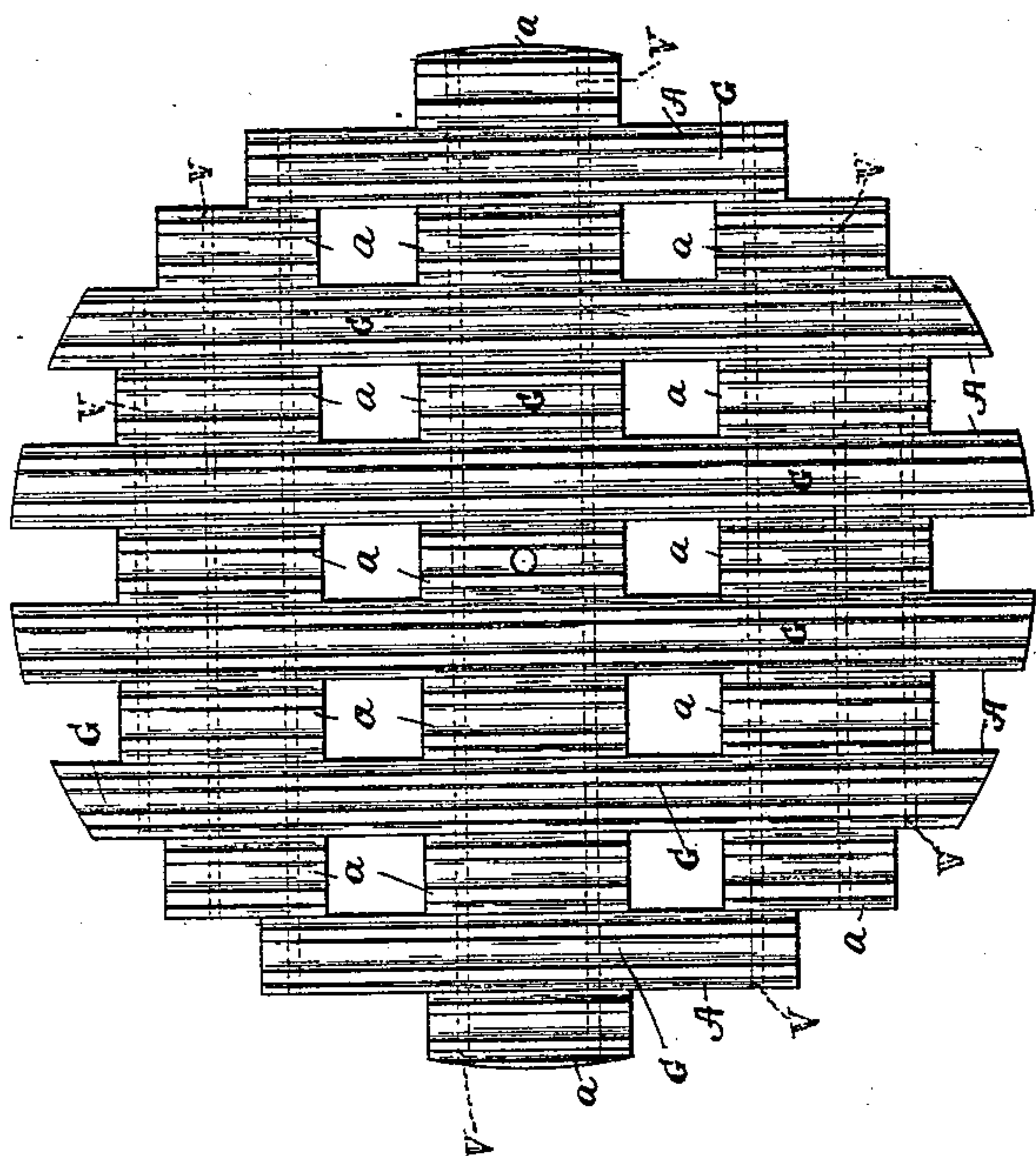


FIG-6-

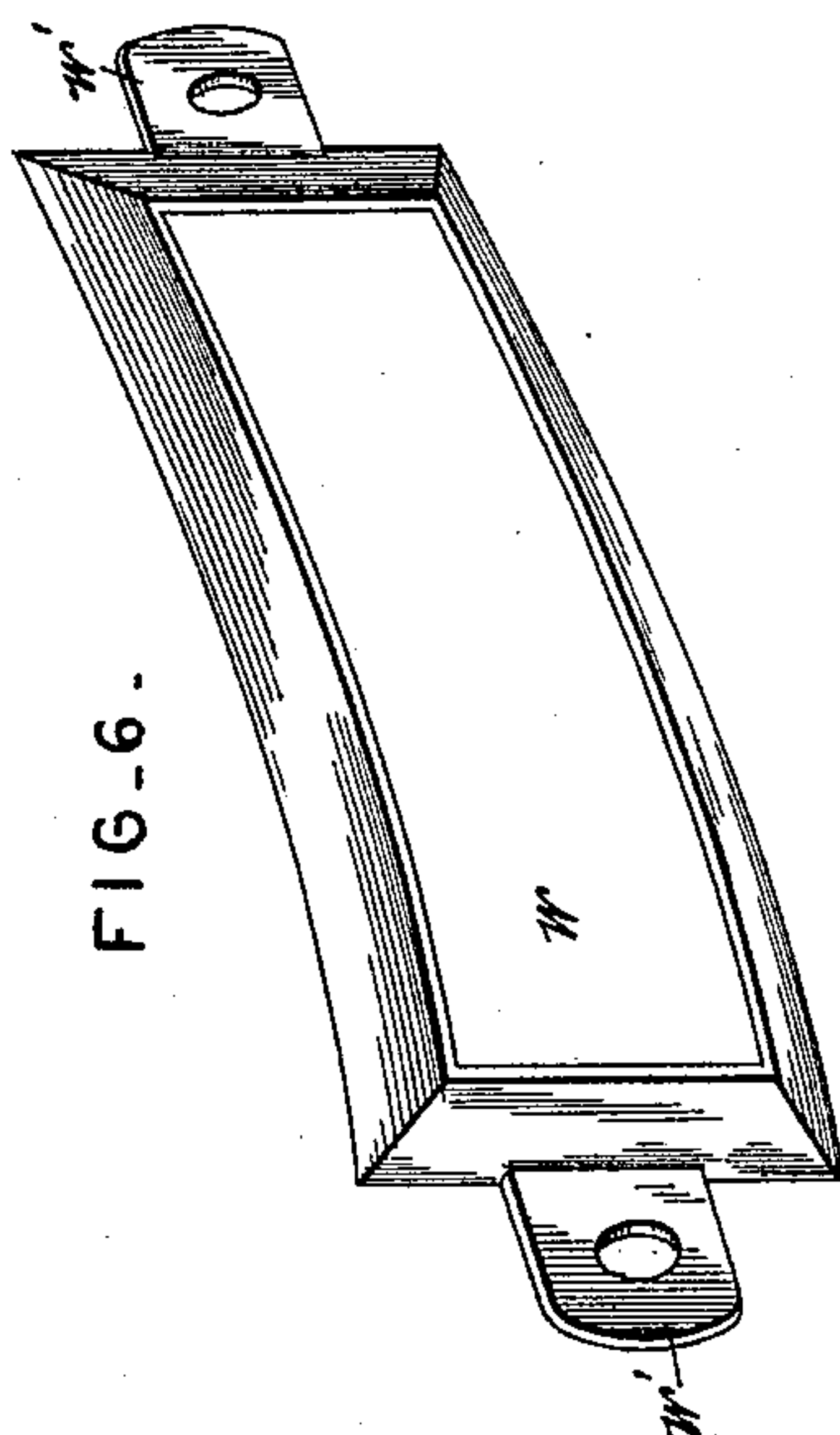
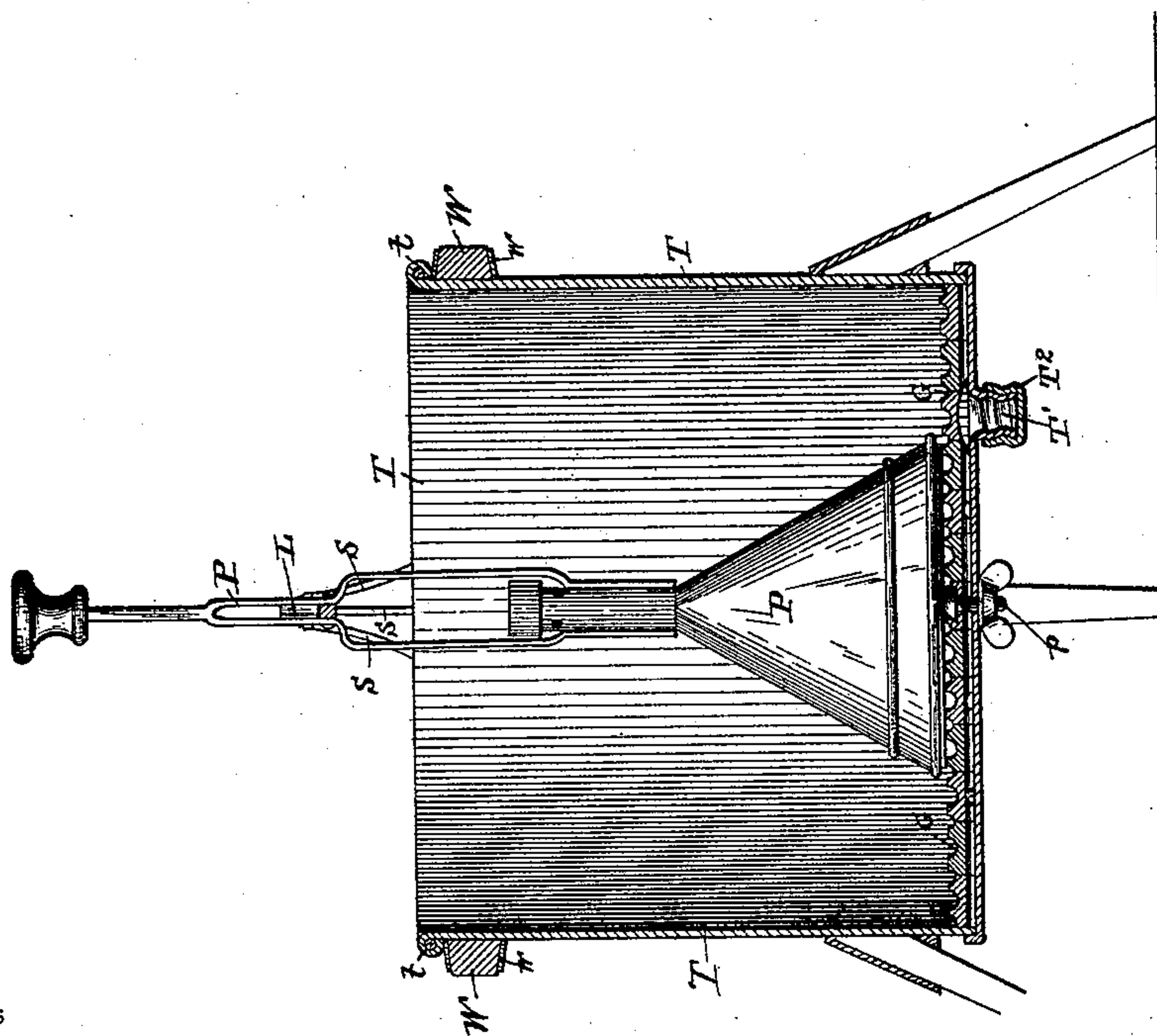


FIG-4-



Witnesses

Jas. K. McLaughlin  
N. L. Gollamer

By his Attorneys,

William G. Boston  
C. A. Snow & Co.

Inventor



# UNITED STATES PATENT OFFICE.

WILLIAM GEORGE BOSTON, OF DAVID CITY, NEBRASKA.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 454,842, dated June 30, 1891.

Application filed December 23, 1890. Serial No. 375,579. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM GEORGE BOSTON, a citizen of the United States, residing at David City, in the county of Butler and State of Nebraska, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing-machines, and the object of the same is to effect improvements upon Patent No. 439,628, granted to me November 4, 1890.

With this object in view the present invention consists in the specific construction of details hereinafter more fully described and claimed, and as illustrated in the two sheets of drawings, wherein—

Figure 1 is a side elevation of the washing-machine complete, showing one handle in its lowered position. Fig. 2 is an enlarged perspective detail of the handle, showing its two parts slightly separated. Fig. 3 is an enlarged perspective detail of the support and yoke removed from the tub and slightly separated. Fig. 4 is a cross-section through the tub, its bottom, and the outlet therefrom. Fig. 5 is a plan view of said bottom. Fig. 6 is a perspective detail of the frame for the attachment of the wringer.

Referring to the said drawings, the letter T designates a tub; S', a support at one side thereof; L, an operating-lever pivoted at one end in said support, and P a pounder pivoted to said lever and adapted to press the clothes being washed against the bottom of the tub, all as is common and well known in devices of this character. All parts of this washing-machine, except in so far as hereinafter more particularly described, are of the general material and construction set forth in my Letters Patent above referred to, and operate in substantially the same way, and hence they are merely illustrated herein without being elaborately described, and reference is made to said patent for a more complete understanding thereof.

The letter H designates an open handle whose straight inner side is provided with an ear E, extending obliquely upward, and h is a frame adapted to be secured to the outside of the tub at any suitable point. The center of the frame is provided with a hole h', through which the ear projects, and at each end of

this hole the frame is curved outwardly, as at h<sup>2</sup>, whereby the straight rear bar H' may be journaled therein in a manner which will be readily understood. There are two of these handles, which are arranged at diametrically-opposite points on the tub near its upper edge, one of which is seen in Fig. 1, and at points between them are arranged the wringer-supports, best seen in Fig. 6. Each of said wringer-supports comprises an open frame w of rectangular shape, whose sides converge outwardly gradually, and each end thereof has a perforated ear w', by means of which it is to be secured to the tub. Within the frame is located a block of wood W, projecting slightly beyond the edges of the frame, as seen in Fig. 4, and also slightly beyond the bead t, around the upper edge of the tub. This thickened portion of the tub is adapted to be clamped by the feet of a wringer, as will be readily understood.

In Fig. 5 is represented a plan view of a bottom, which I insert in the tub below the pounder. This bottom comprises cross-strips A, separated by blocks a, whose ends are not in contact, whereby holes are left completely through the bottom, and transverse tie-rods V, extending through the blocks and strips for holding the whole together. The bottom conforms with the shape of the interior of the tub, and a galvanized hand-nut p passes through this false bottom and through the true bottom of the tub, as shown in Fig. 4. The several strips and blocks are provided with grooves G in their upper faces, and also, if desired, in their lower faces. When the pounder is operated in the well-known manner to compress the clothes against the bottom, this improved bottom, which is preferably of wood, will, by its comparative softness, prevent the clothes from being torn or mutilated, and by the roughness of its surface and openness of its configuration, more readily cause the formation of suds, and hence more thoroughly wash the clothes. Instead of using the faucet illustrated in my former patent, I use a good-sized threaded nozzle T' in the bottom of the tub for drawing off the contents, and close this nozzle by a screw-cap T<sup>2</sup>, as also seen in Fig. 4.

The letter S designates a long rod secured at its lower end to one of the legs or to the



body of the tub and branched at its upper end, as at  $S^2$ , each branch being provided with perforations  $S^3$ . The letter M designates a bracket whose feet  $m$  are perforated for the reception of screws or rivets, by means of which it is attached to the tub and whose upper end has a flat seat N, provided with an upwardly-projecting pivot-pin U. Through the perforations  $S^3$  of the branched upper end  $S^2$  of the rod S pass rivets or bolts O, securing it to the bracket N.

Y is a yoke, having a flat seat  $y$  pivotally mounted on the pin U, and within this yoke is pivoted one end of the main lever L. By this arrangement when the lever is moved vertically it turns on the pivot in the yoke, and when it is moved horizontally the yoke turns on the pivot-pin of the bracket.

These improvements upon the machine which is the subject-matter of the patent above mentioned render it a very desirable device of this character, and I reserve the

right to employ any one or more of the features mentioned according as experience may prove are desirable or as public demand may lead me to believe are desirable in order to produce a popular and merchantable article.

What is claimed as new is—

In a washing-machine, the combination of a metallic tub, a false wooden bottom therein comprising cross-bars, interposed blocks, all grooved in their faces, transverse rods connecting said parts, and a galvanized-iron bolt passing through said false bottom and through the bottom of the tub, and a plunger in said tub, and means for operating it, all substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM GEORGE BOSTON.

Witnesses:

HERMAN H. SHUTZ,  
MEL. E. BAUER.