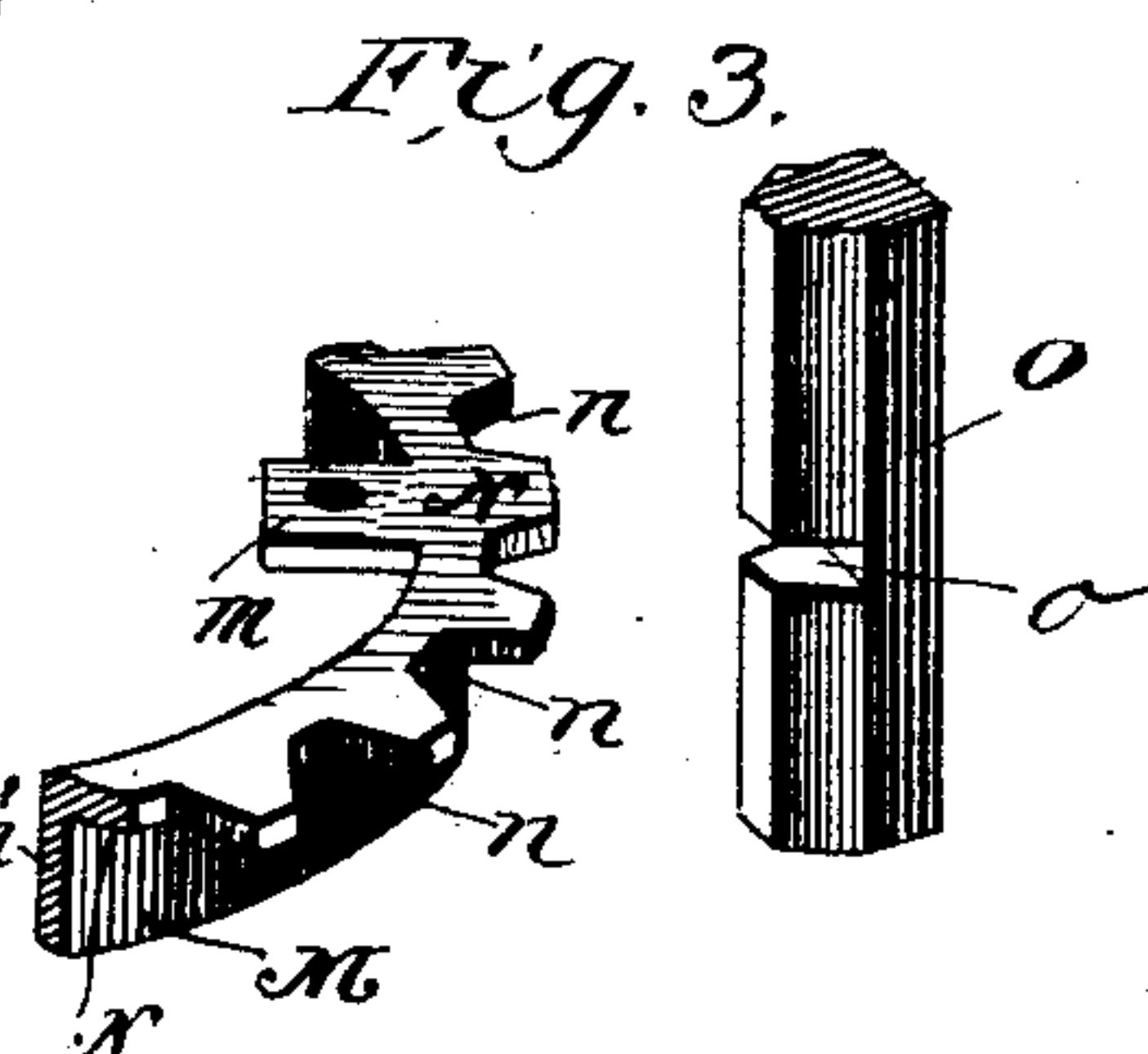
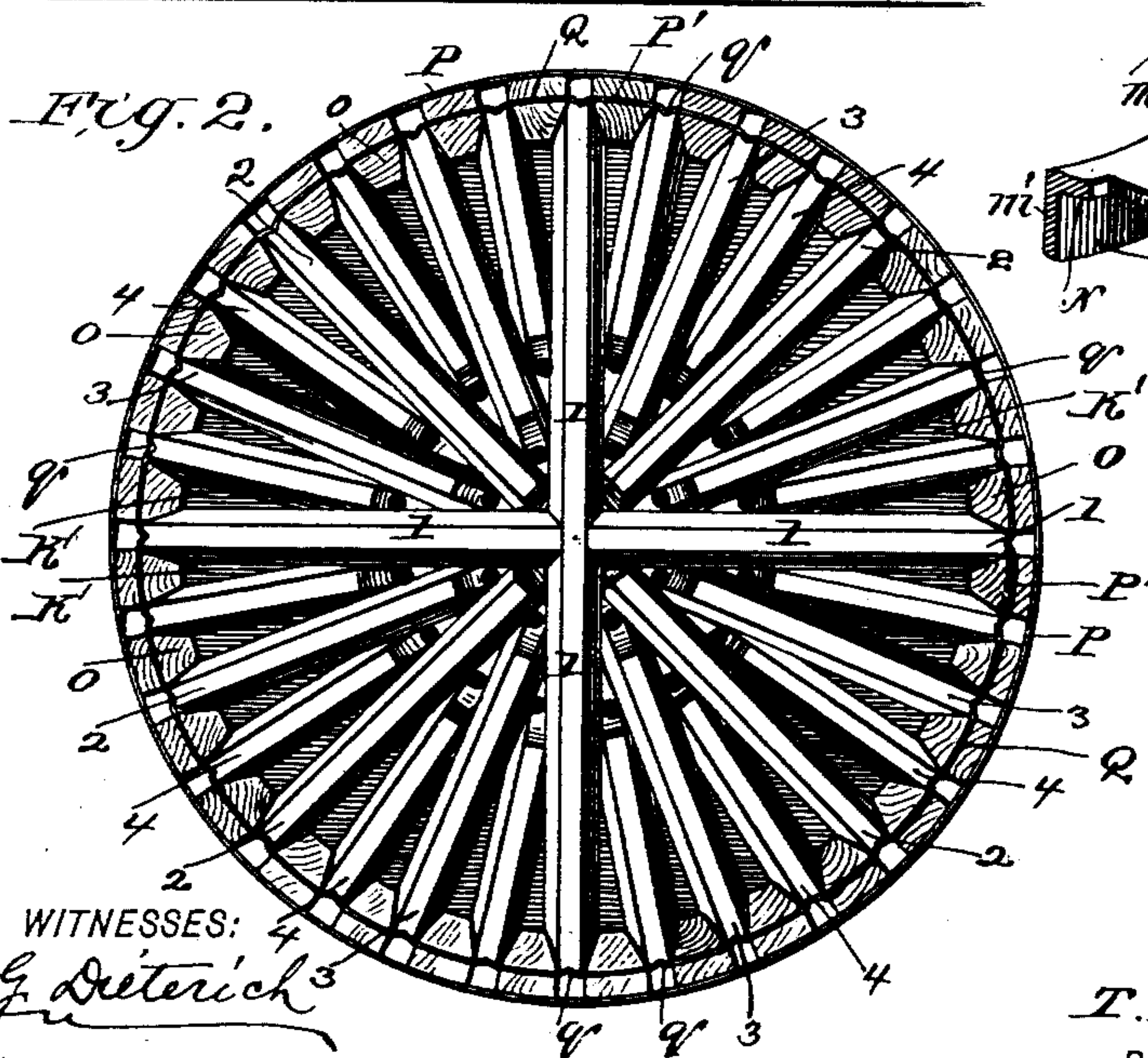
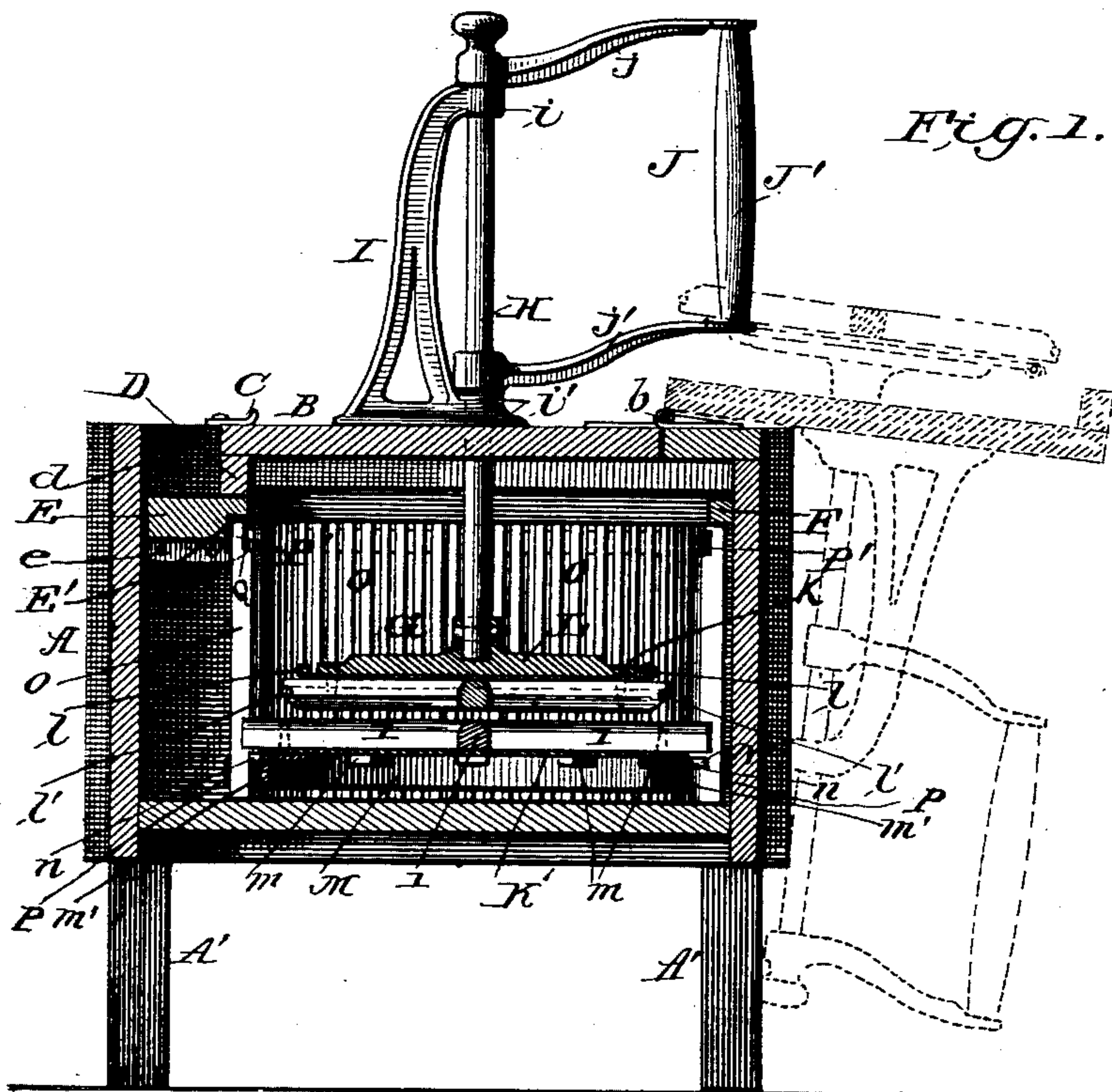


(No Model.)

T. B. ARNDT.
WASHING MACHINE.

No. 520,350.

Patented May 22, 1894.



WITNESSES:
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THEOPHILUS B. ARNDT, OF FLORIN, PENNSYLVANIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 520,350, dated May 22, 1894.

Application filed July 10, 1893. Serial No. 480,048. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILUS B. ARNDT, residing at Florin, in the county of Lancaster and State of Pennsylvania, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

My invention is an improvement in washing machines and has for its objects among others to provide an improved rubbing surface, novel means for securing the bed or clothes receiver in the suds box, and a simple construction of handle adapted for persons of different heights; and the invention consists in the novel constructions, combinations and arrangements of parts as will be hereinafter described, and pointed out in the claims.

In the drawings Figure 1 is a vertical section on a line slightly to one side of the central shaft. Fig. 2 is a top plan view of the clothes holder, and Fig. 3 is a detail view showing a portion of the notched flanged ring and a part of one of the notched slats engaging the same.

The suds box A may in general respects be of ordinary construction having the legs A'. This box A is provided with a lid B, hinged at one edge at *b* and held closed at its other or swinging edge by means of a button or buttons C. At its said swinging edge the lid B terminates short of the side of the suds box and has a depending flange like board or batten D which forms one side of a box or depression *d*, the other sides of which are formed by the suds box and the bottom of which is a board E rested upon cleats *e* secured to the sides of the suds box. This board E serves to lock the clothes holder in place in the suds box, the said board being in turn locked in place by the lid batten resting against it, the lid being secured by the fastenings therefor as described. By the described construction I form at one side of the top of the suds box a box or recess in which soap and the like may be held and which also leaves the upper edge of the side of the suds box unobstructed to facilitate the attachment of a wringer without necessitating the projection of said side of the box above the plane of the lid.

The clothes holder which will be more specifically described hereinafter is made in

basket form seated upon the bottom of the suds box and rests at one upper edge below a cleat F secured to one end of the suds box and fits at its opposite upper edge in a seat E', formed in the inner edge of the board E. This construction, it will be seen, permits the convenient removal of the clothes holder and yet permits the same to be securely fixed in position for use.

The rubber comprises the head G and the shaft H supported and movable longitudinally in bearings supported upon the lid. These bearings are preferably provided at *i* and *i'* in a bracket I secured upon the lid, the upper bearing *i* being sufficiently far above the lower one *i'* to permit the desired longitudinal movement of the rubber shaft H. This shaft is provided with the handle J having the vertical hand bar J' and the arms *j* *j'* connecting such hand bar with the shaft H, and arranged the former above and the latter below the upper bearing *i*, so that the shaft may be moved longitudinally for the purpose described hereinafter. The hand bar J' is made sufficiently long to adapt the machine for operation by a short or a tall person, the short one grasping the lower and the tall one the upper end of the hand bar as will be readily understood. The longitudinal movement of the shaft permits the head to be raised up close to the under side of the lid to permit the latter to be opened and closed without the head engaging the clothes holder.

The rubbing surfaces of the head and of the clothes holder are alike and are composed of a plurality of series of ribs, the ribs of one series extending to the center of the surface and the ribs of each other series terminating at different distances from such center as shown. Thus it will be seen that the ribs 1 of one series extend to the center of the surface, the ribs 2 of the next outer series terminating near to the center, the ribs 3 of the next series terminating somewhat farther from the center than the ribs 2 and the ribs 4 terminating likewise farther from the center than the rib 3, all of said ribs extending to the outer edge of the surface as shown. This construction is important as it enables the ribs to be made of uniform cross section, permits them all to be arranged radially upon the surface, and provides at each point

of the surface a sufficient number of rubbing ribs to accomplish the desired results. Another and an important result accomplished by this arrangement of the ribs is that it permits the ribs to be made sufficiently large at all points to bear the wear imposed upon them so the rubbing surfaces will be more durable and will not require to be replaced so often as if narrower ribs were used. These rubbing surfaces may be formed by stamping out of suitable sheet metal or by carving from wood, but are preferably formed by making the ribs of wooden strips and securing them by screws or in other suitable manner upon backing K, which may preferably be heavy sheet metal as shown. The rubbing head is formed with a spider L which braces the backing head and is further braced by a wire l secured upon the outer ends of the ribs of the head and extending around said head as shown. It is also preferred to provide the head with a wire l' sunken in grooves or notches formed in the outer extremities of the ribs and serving to lock said ribs together at such ends so each one will brace the other.

The plates K K' respectively of both the rubber and the clothes holder are provided with openings to permit the circulation of water through them.

The back plate of the clothes receiver is supported upon an annulus or frame ring M having inwardly projected lugs m to which the plate K' is secured. This ring M also has a depending annular flange m' and an outwardly projected annular flange N which is notched at n at close intervals to receive the side slats O which are also notched at o near their lower ends and the notches o n are fitted together, the slats O bearing below the flange N, against the depending flange m'. A strap or hoop P encircles the holder outside the slats O and about in line with the flange N. This hoop operates to secure the slats in contact with the flange N and the notches o n prevent any longitudinal or lateral displacement of the slats as will be readily understood. In the upper ends of the slats I sink in grooves or kerfs P' a connecting strip Q preferably of sheet metal which is bent to produce offsets q between the slats which operate to brace such slats properly apart and hold them in the uniform desired distance apart, preserving the clothes holder in the desired shape at the top, the bottom being preserved by the construction before described.

It will be noticed that the clothes holder has the same number of ribs as there are slats

each rib meeting in miter form between the slats leaving no exposed ends to tear the clothes.

Having thus described my invention, what I claim is—

1. In a washing machine substantially as described, a clothes holder consisting of the bed having a series of radiating ribs, the upright slats alternating with and fitting near their lower ends snugly between the ribs of the bed and means for fastening said slats in such position substantially as and for the purposes described.

2. In a washing machine, the combination with the bed of the clothes receiver having an outwardly projecting annular flange provided at intervals with notches of the side slats having notches coinciding with and fitted into those of the annular flange and means for holding said slats in contact with the flange, substantially as set forth.

3. In a washing machine, a clothes holder having its bottom formed with a back plate provided with ribs, an annular frame ring having a seat for said plate, a depending flange and an outwardly projected flange provided with notches the slats having notches fitted to those in the flange and a hoop binding said slats in contact with the flange, substantially as set forth.

4. In a washing machine, a clothes holder provided with upright slats having kerfs or notches in their upper ends between their inner and outer edges and a connecting rod or strip seated in said kerfs or notches and having offsets between the adjacent slats whereby to hold the same apart, substantially as set forth.

5. In a washing machine, substantially as described, a clothes holder consisting of the bed plate provided with the ribbed rubbing surface, the annular ring frame provided with inwardly projected lugs to which the back plate is secured and with an outwardly projected notched flange, the upright slats provided in their upper ends with kerfs or notches and having notches near their lower ends fitted to the notches in the annular flange, a hoop binding such slats in contact with the frame ring and a connecting bar or strip seated in the end kerfs of the slats and provided with offset portions between the slats whereby to secure the slats apart all substantially as and for the purposes set forth.

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Witnesses:

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