

W. W. WRIGHT.

Improvement in Casters for Sewing Machines.

No. 124,106.

Patented Feb. 27, 1872.

Fig. 1.

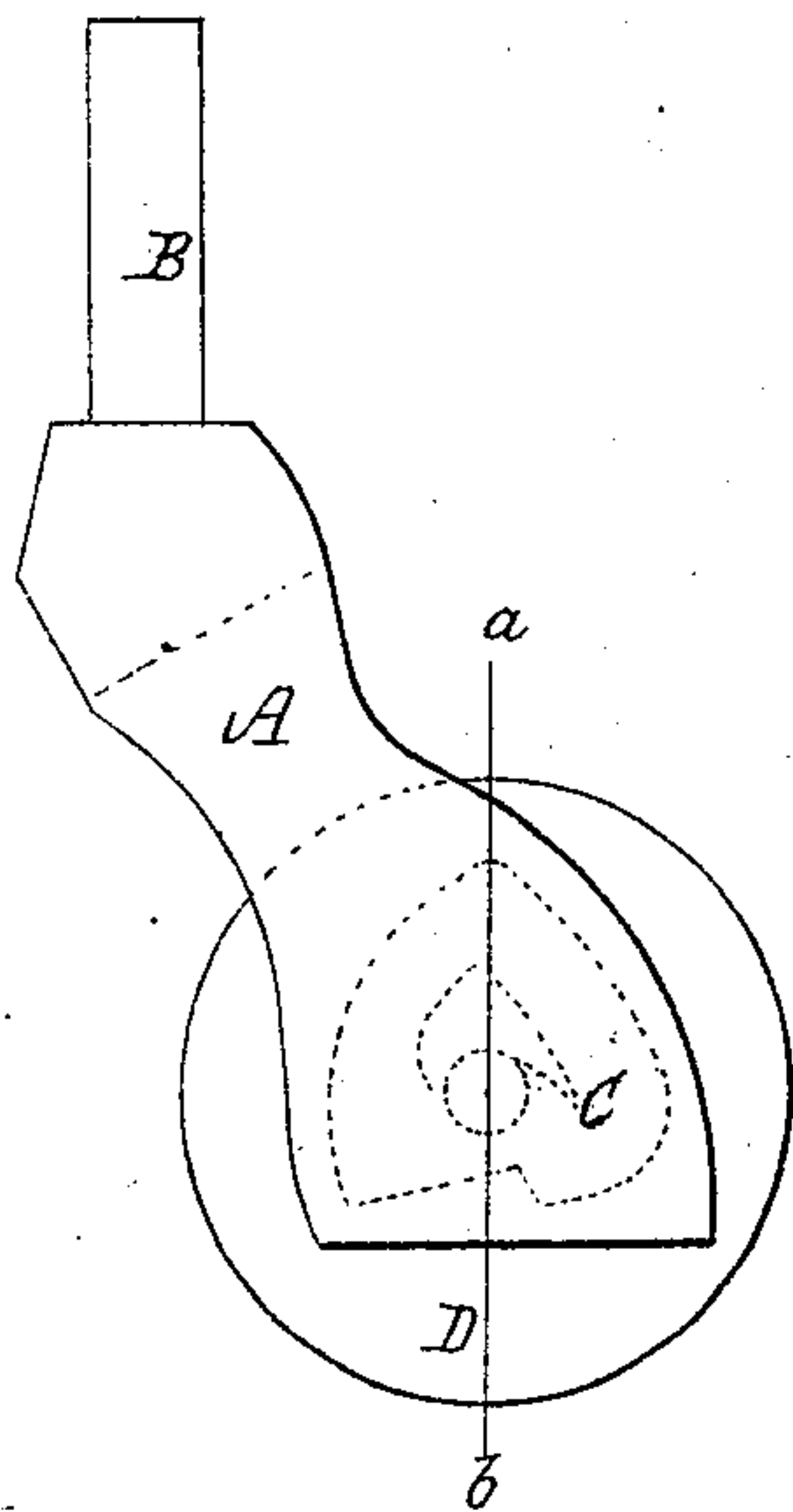


Fig. 3.

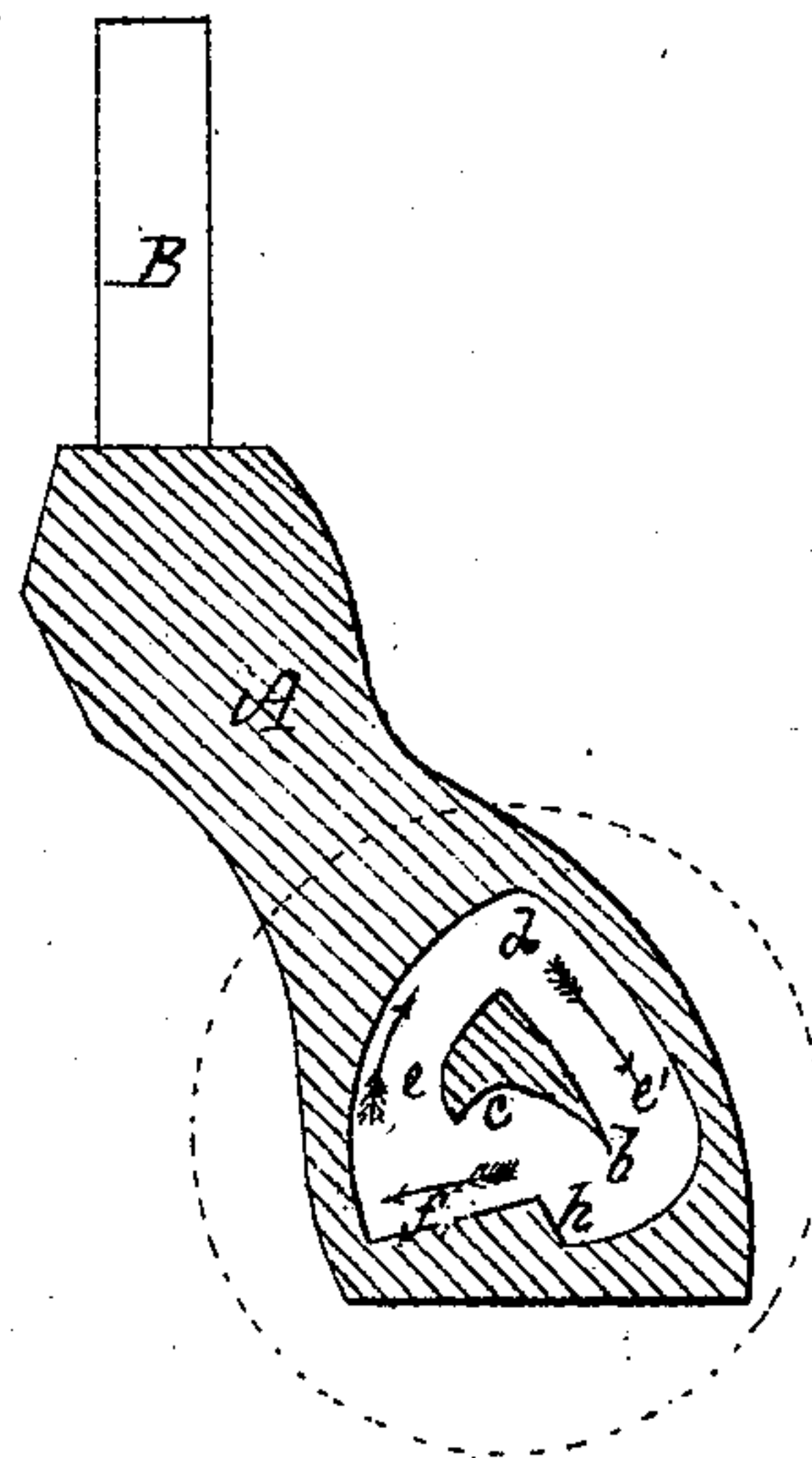
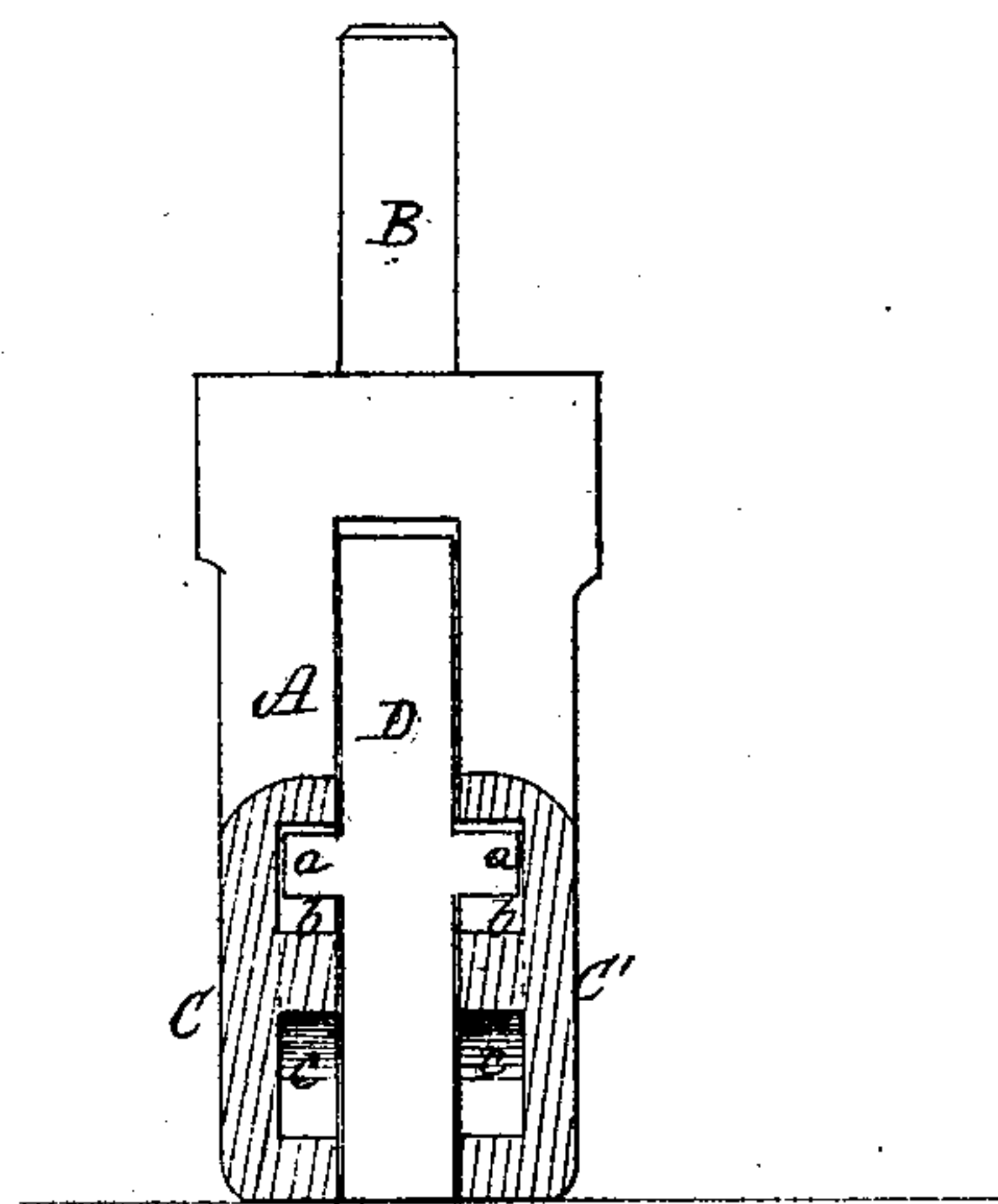
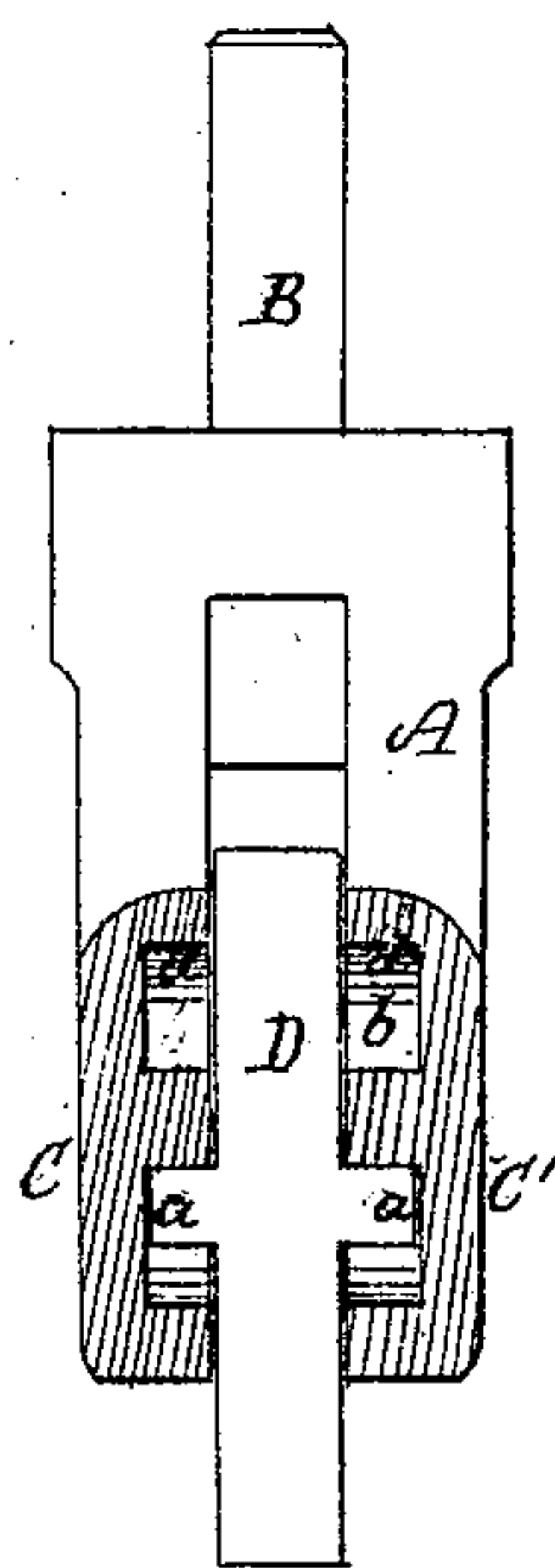


Fig. 2.
on line a, b. of Fig. 1.



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UNITED STATES PATENT OFFICE.

WALLACE W. WRIGHT, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN CASTERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 124,106, dated February 27, 1872.

To all whom it may concern:

Be it known that I, WALLACE W. WRIGHT, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have made an invention of a new and useful Changeable Caster for Sewing-Machines, &c.; and do hereby declare the following description to embrace the nature, purposes, and advantages of my said invention, due reference being had to the drawing accompanying such description, and in which—

Figure 1 is an elevation, Fig. 2 a vertical and transverse, and Fig. 3 a vertical and longitudinal section of a caster embodying my invention, the latter figure being taken without the wheel. Fig. 4 is a vertical and transverse section of the caster, which exhibits the foot resting upon the floor, and in a position to support the weight of the object to which it is attached, the wheel resting upon the floor, but performing no function.

This invention consists in the employment, within a furcated foot or pedestal, of two oppositely disposed twin-shaped irregular or sinuous channels, and the combination, with such foot and channels, of a roller or wheel, provided with an outstanding axial journal upon each side, one portion of the channel constituting a bearing, which enables the wheel to support the weight of the machine or other object, and elevate it or its legs from off the floor, and the other, which is above it, a recess for receiving loosely the journal of the wheel, while the leg of the object is resting directly upon the floor and its weight upborne by its legs; the remaining portion or portions of the channel constituting a path, whereby the wheel is compelled—by its own gravity as the leg is raised, or by the descent of the leg as it is returned to place—to automatically and unerringly travel from one resting-place to the other. The purpose of this invention is to produce an adjustable or changeable caster for sewing-machines, articles of household furniture, and other objects, which, while requiring a steady and immovable foundation, are yet often to be moved about.

The accompanying drawing represents at A a furcated block or foot, provided at top with a suitable spindle, B, or its equivalent, for attachment to the leg of a sewing-machine or other object. C C' represent the two side cheeks of the furcated foot, and D a circular

wheel or roller, to trundle along the floor, such wheel having an axial journal, *a*, projecting from each side. Within the inner face of each cheek C I form an irregular sunken channel, *b*, the width of which is equal to or slightly greater than the diameter of each journal, *a*, which enters it, the two channels being counterparts of and disposed directly opposite each other, and so as to constitute a common path to the axis of the wheel D. The form of each channel *b* is as follows: First, a lower central portion, *c*, in the upper termination of which the journal *a* finds a bearing, the weight of the super-disposed object being thrown upon this bearing *c* at certain times. The wheel, when its journals are situated in the bearings *c*, rests upon the floor, and upholds the weight of the machine or other object, the said machine, by means of the wheel, being trundled about the floor and changed in its position at pleasure. Secondly, the channel *b* consists at its upper part of a recess, *d*, which receives loosely the journal of the wheel, and permits the latter to rest upon the floor relieved of the weight of the object rested upon it, as before stated, the weight in this instance being directly sustained by the foot which rests rigidly and immovably upon the floor. Thirdly, and lastly, the contour of the channel *b* is completed by connecting the bearing *c* and recess *d* upon each side by a curved portion, *e* or *e'*, a shallow sloping step, *h*, being created in the bottom of the channel, to divert the journal of the roller into the bearing *c* as the foot is lowered toward the floor.

The action of the wheel D and dually-arranged channels *b b* is as follows, supposing each journal of the roller to be situated in the adjacent bearing *c*, and the weight of the machine or other object borne by such journals and bearings, the foot being isolated from the floor, and the device constituting, substantially, an ordinary caster: Upon lifting the foot A and roller D from off the floor, the journals of the latter leave the bearings *c*, and descend the inclined plane *f*, which constitutes the lower boundary of the side path *e* before alluded to; and when the foot A is returned to the floor, the wheel, by abutting against said floor, compels its journals to ascend the paths *e e*, and enter the recesses *d d*, thus permitting the foot to rest directly upon the floor, and bear the weight of the object to which it is attached,

the wheel also resting upon the floor, but relieved of the weight first exerted upon it. Upon a second elevation of the foot A, each journal leaves the portion *d* of the channel *b*, and descends the path *e'* into such a position, with respect to the bearing *c* and step *h*, that, when the foot A is lowered toward the floor, each journal is deflected into the adjoining bearing *c*, and the weight of the object sustained by such journals and the wheel, the transformation from a trundling caster to a plain foot, and vice versa, being effected by the mere raising and lowering of such foot.

In conclusion, I would state that it is manifest that the construction of the castor—both as to the wheel and the form and construction of the grooved bearings for the same—may be varied without departure from the principle of my invention, which consists in the arrangement of the parts specified in such manner that, when the caster is lifted, the wheel will, by this operation, be caused to shift from the one of its two positions which it then occupied to the other, as above described. I do not, therefore, limit my claim to the precise details herein given; but

What I claim, and desire to secure by Letters Patent, is—

1. A caster in which the wheel is combined with the grooved arms or bearings herein described, or the equivalent of the same, substantially in the manner shown and set forth, so that the act of lifting said caster (or the article to which it is attached) from the floor will cause the wheel to shift from one to the other of the two positions which it can assume, whereby the caster, according to the position assumed by the wheel, becomes either a caster, in the ordinary meaning of the word, to trundle over the floor, or a foot to rest solidly thereon, as described.

2. I also claim the channels *b* in the legs or bearings, which receive the wheel-journals, each of said channels consisting of the bearing *c*, recess *d*, side branches *ee'*, inclined plane *f*, and step *h*, substantially as shown and set forth.

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Witnesses:

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