

(No Model.)

N. P. STEVENS.

MACHINE FOR DRESSING HOOPS.

No. 267,378.

Patented Nov. 14, 1882.

Fig. 1.

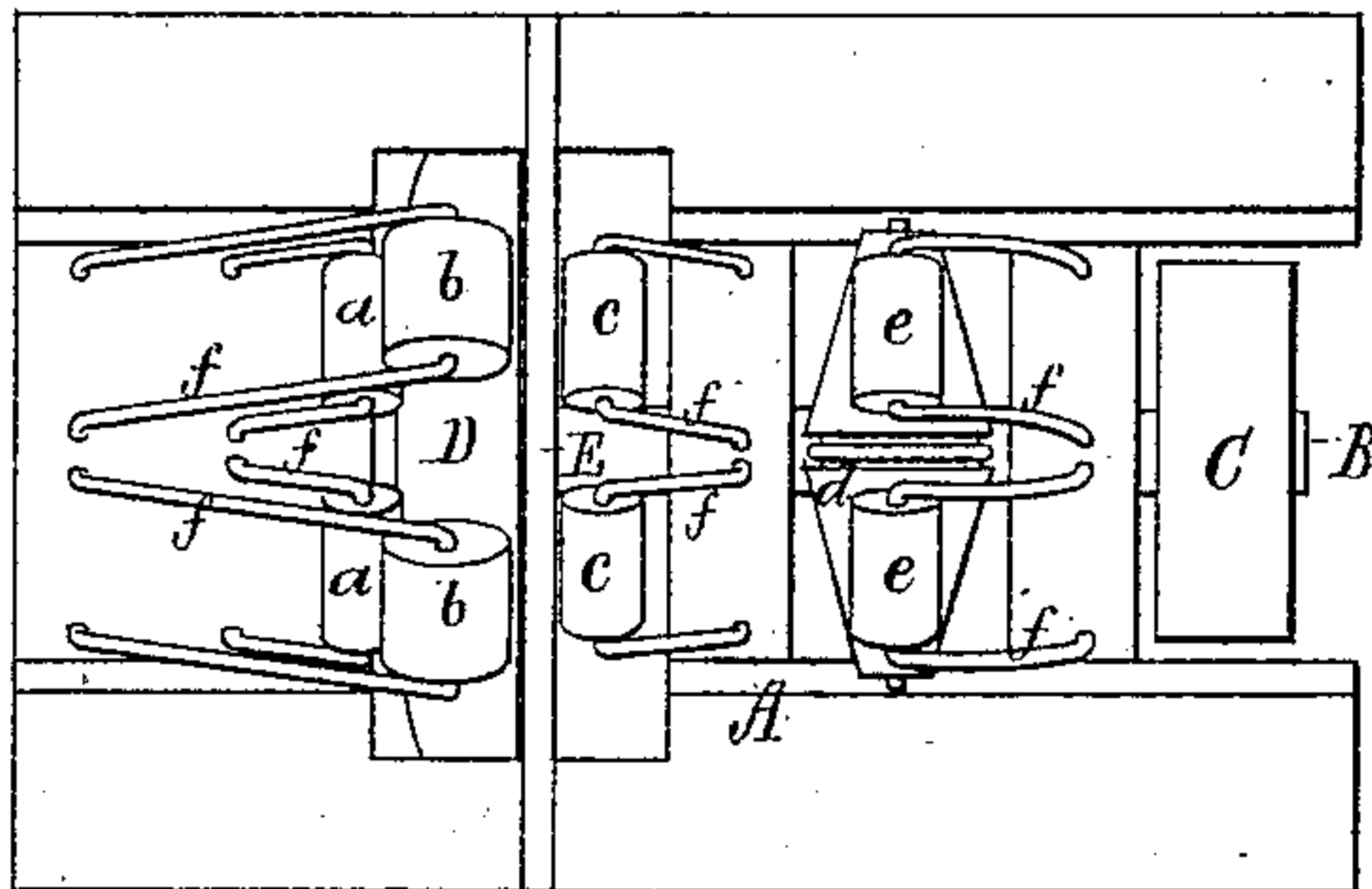


Fig. 2.

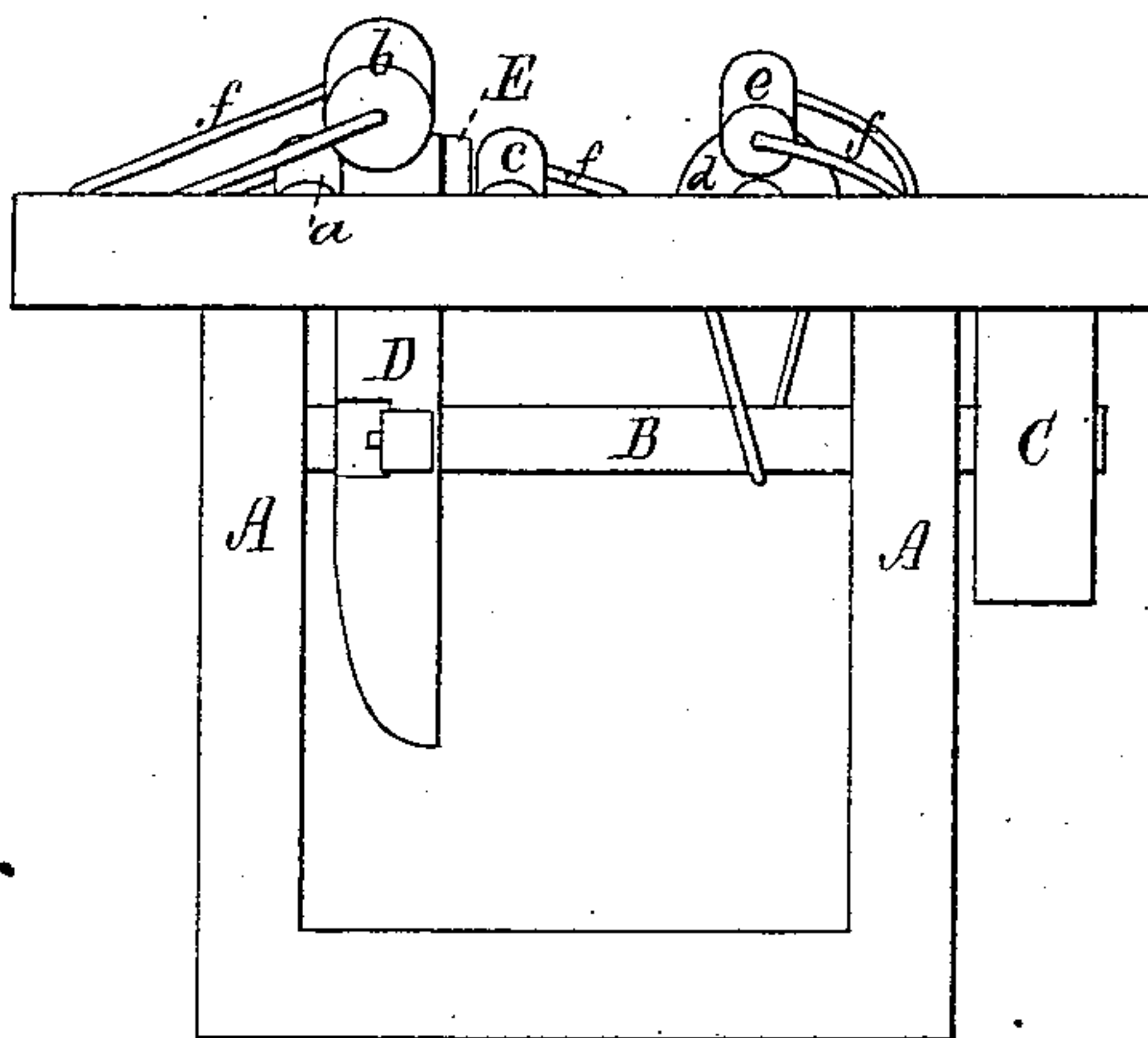


Fig. 3.

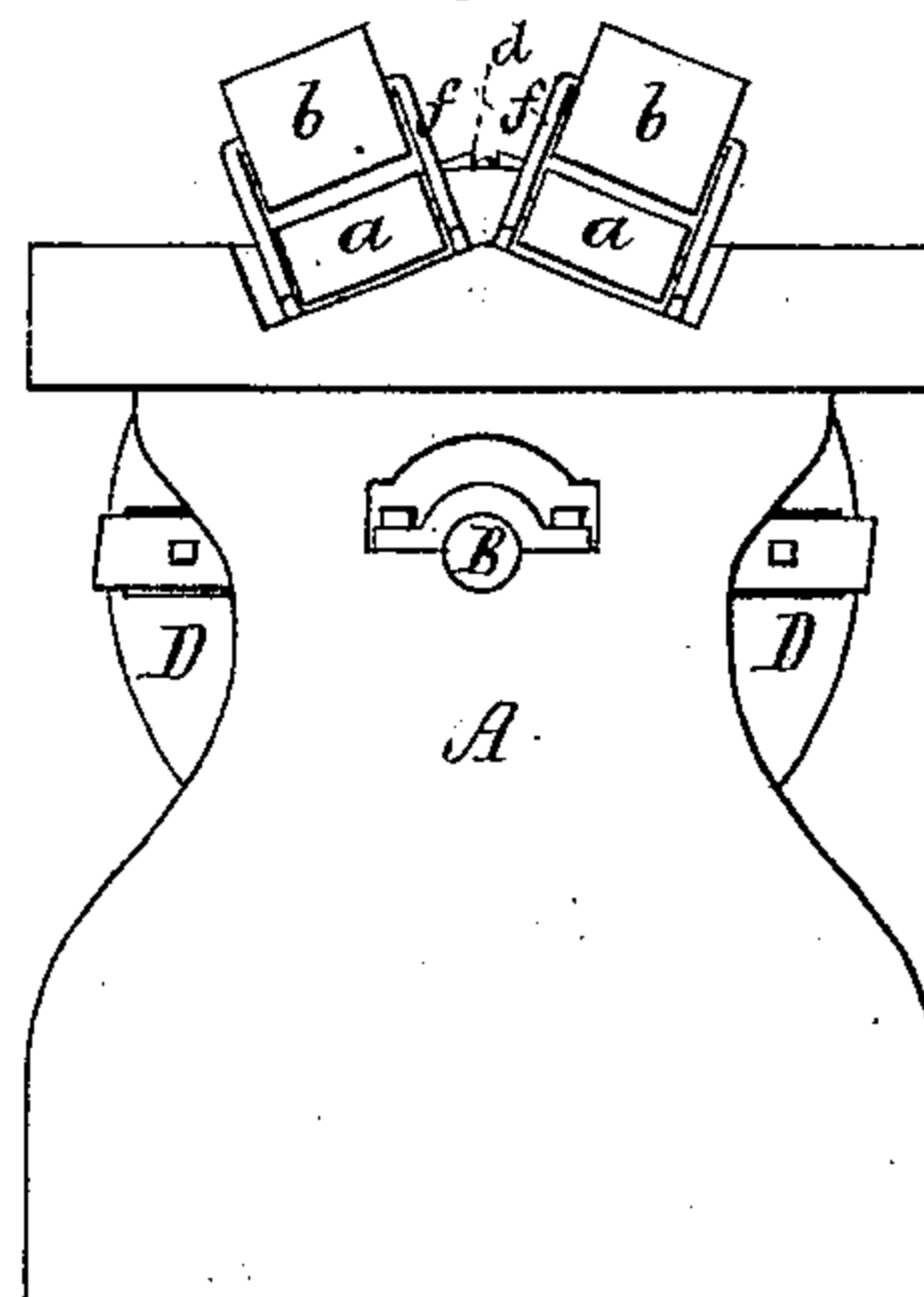
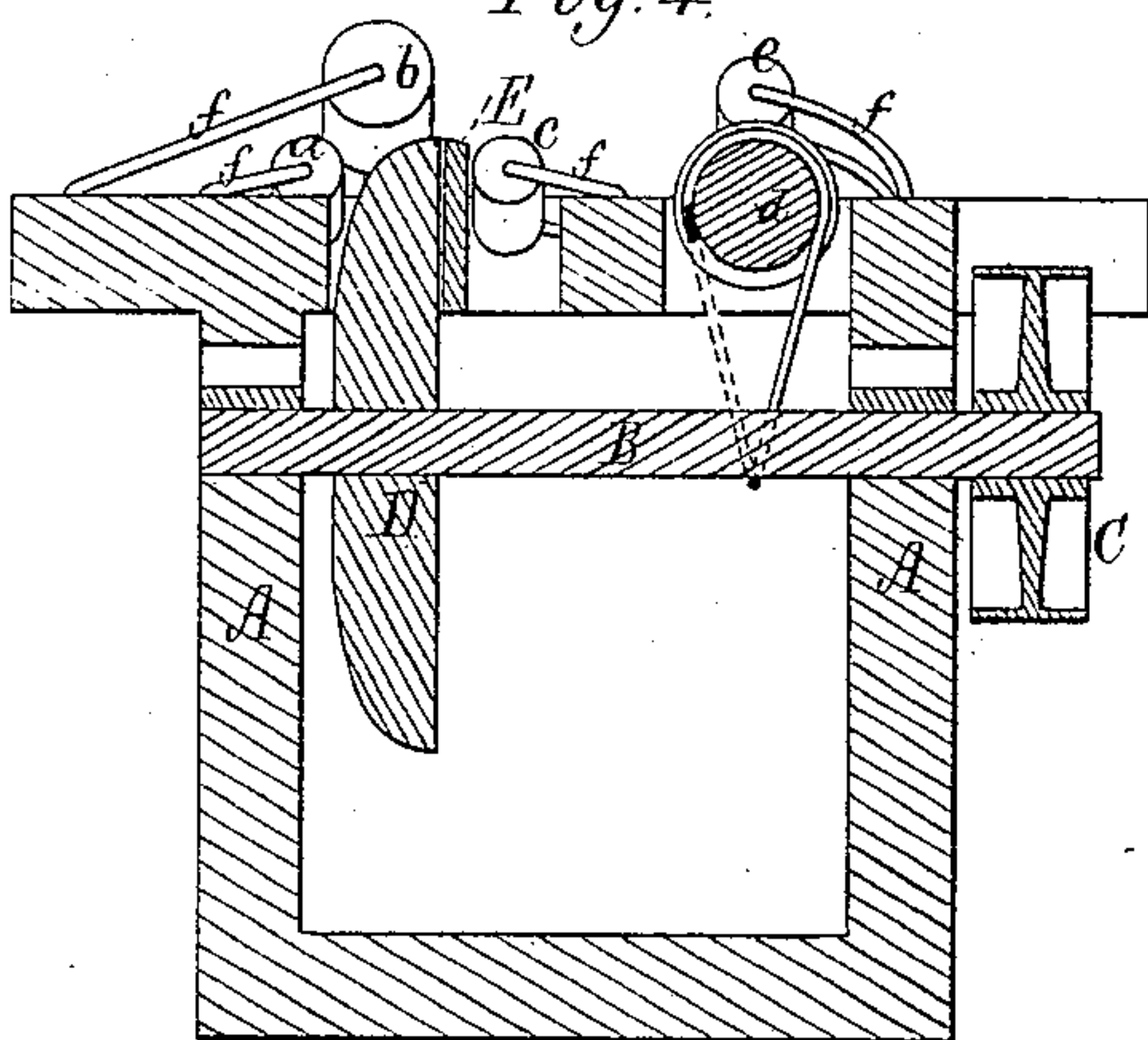


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

NATHAN P. STEVENS, OF CONCORD, NEW HAMPSHIRE, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HIMSELF AND LORENZO D. BROWN, OF SAME PLACE.

## MACHINE FOR DRESSING HOOPS.

SPECIFICATION forming part of Letters Patent No. 267,378, dated November 14, 1882.

Application filed August 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, NATHAN P. STEVENS, of Concord, in the county of Merrimack, of the State of New Hampshire, have invented a new and useful Improvement in Machinery for Dressing Hoops; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

10 Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a rear end elevation, and Fig. 4 a longitudinal section, of a machine embodying my invention.

15 This machine is designed for use with mechanism for sawing barrel-hoops from what are termed "hoop-poles," and may have attached to or arranged near it machinery for such purpose, it being to plane or dress the sawed side of the hoop.

20 The nature of the invention is defined in the claim hereinafter presented.

In the drawings, A is the machine-frame, it having suitably applied within it a shaft, B, provided with a driving wheel or pulley, C. 25 There is also fixed on such shaft, concentrically with it, a cutter-wheel, D, which is conoidal, or approximately so, in form, as shown, and at its periphery is furnished with cutters. The wheel projects somewhat above the frame A, the flat 30 or larger side of the wheel being arranged next to a stationary rest, E, which extends across the frame, is beveled at its upper edge, and, besides, is arched or crowned at top in correspondence with the periphery of the cutter-wheel. 35

In rear of the cutter-wheel are two guide-rollers, *a a*, and two pressure-rollers, *b b*, arranged as represented, there being in front of the rest E two other guide-rollers, *c c*, and in 40 advance of them a delivery-roller, *d*, and two pressure-rollers, *e e*, these latter rollers being arranged immediately over the delivery-roller. Each of the aforesaid rollers is supported by an elastic bearing-yoke, *f*, which, U-shaped, 45 as shown, has its prongs secured at their ends in the frame. This elastic bearing-yoke is not only to support the roller so that it may revolve, but is to enable the roller to readily ac-

commodate itself to the hoop, as the latter may vary in thickness. But one set of guide-rolls, 50 *a c*, and pressure-rollers, *b e*, need be used with the cutter-wheel, the stationary arched rest, and the delivery-roller; but two sets, arranged as shown, are advantageous when the sawing machinery has two endless band-saws, with 55 the dressing-machine disposed between them, as with this arrangement the single cutter-wheel and stationary rest will answer, with the two sets of rollers, to effect the dressing of the hoops sawed by the two saws. 60

In operating with the machine a hoop is to be introduced, sawed side down, between one of the guide-rollers and its pressure-roller, in rear of the cutter-wheel, and is to be pressed forward over the cutter-wheel and upon the stationary rest, and thence upon a guide-roller, 65 *c*, and between the delivery-roller *d* and one of its pressure-rollers, *e*. The cutter-wheel, being supposed to be in revolution, will cut or dress the hoop transversely thereof as it may 70 progress, and the stationary rest will keep it in its due relation to the cutter-wheel. The rear pressure-roller will bear the hoop down upon the rest, and will accommodate itself to the hoop as the latter may increase or decrease 75 in thickness. The delivery-roll and its pressure-roller will advance the hoop after it may be received between them, and the hoop as it may advance will be planed or dressed on its sawed side, which side, after being so dressed, 80 will be slightly concave transversely of it. An endless belt, *h*, going around the delivery-roller at its middle, and also around the shaft, serves to revolve the said roller.

I am aware that in ordinary planing mechanisms having a cutter-cylinder there is in front 85 of such cylinder a bearing plane surface to support the board to be planed, and therefore I do not claim such. A rest or surface of the kind would not answer when a cutter-wheel 90 as hereinbefore described is used to cut the hoop transversely, for the rest for such a wheel has to be arched or crowned, as explained, in order for it to properly sustain the hoop relatively to the wheel, and, besides, it generally 95 should be beveled, as represented, in order for



it (the said rest) to allow the hoop passing over it to advantage.

I claim—

5 In combination with one or more sets of guide, pressure, and delivery rollers, arranged as set forth, and with a cutter-wheel arranged therewith to cut in a direction transversely of a hoop while such hoop may be moving be-

tween such rollers, an arched rest disposed in front of such wheel and to support the hoop, so substantially as set forth.

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Witnesses:

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