

(No Model.)

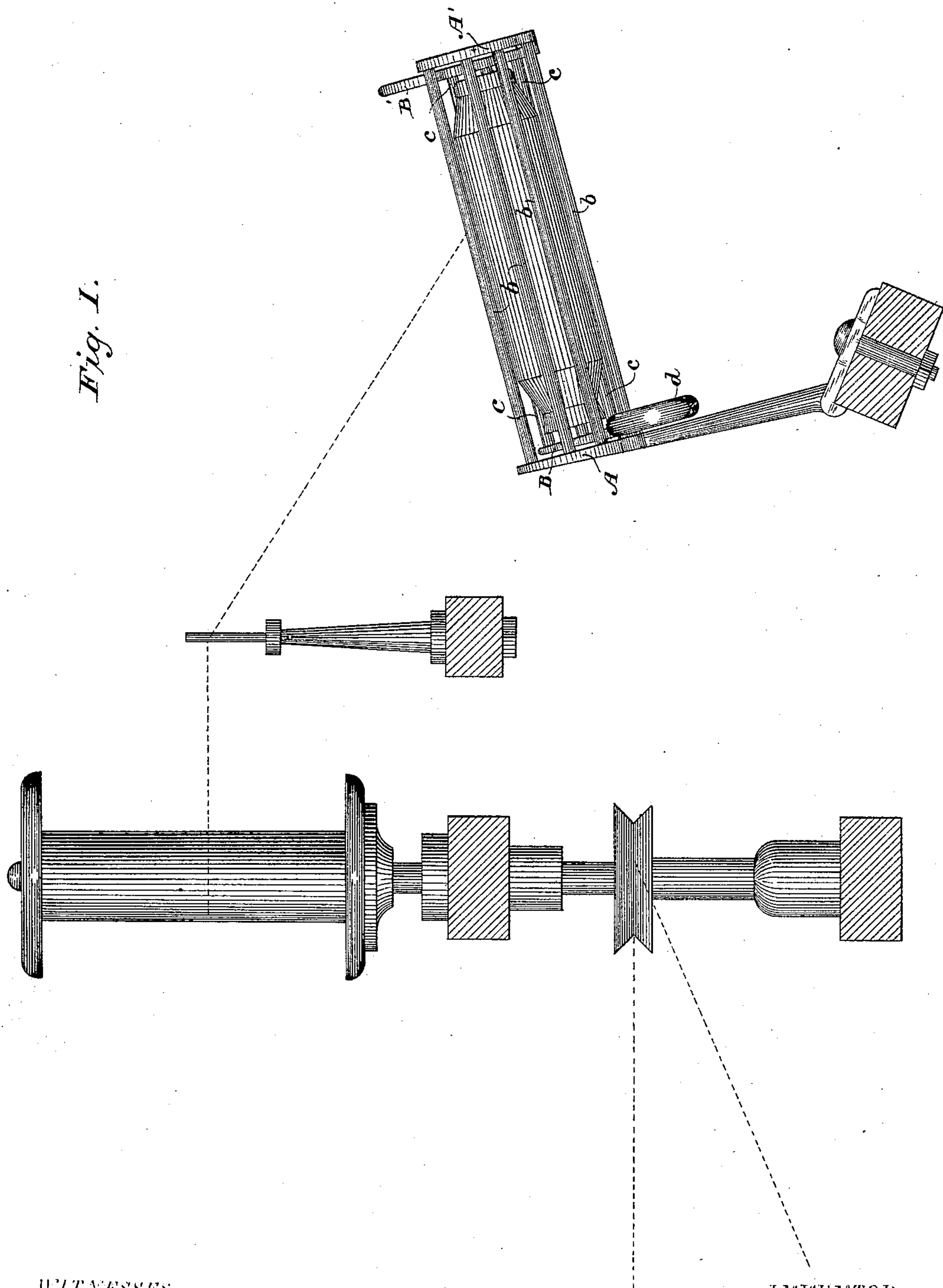
2 Sheets—Sheet 1.

A. T. ATHERTON.

BOBBIN HOLDER FOR SPOOLING MACHINES.

No. 270,721.

Patented Jan. 16, 1883.



WITNESSES

Wm A. Skinkle.
Francis D. Shrewsbury.

INVENTOR

Abel T. Atherton.

By his Attorney

Marcellus Bailey

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Fig. 3.

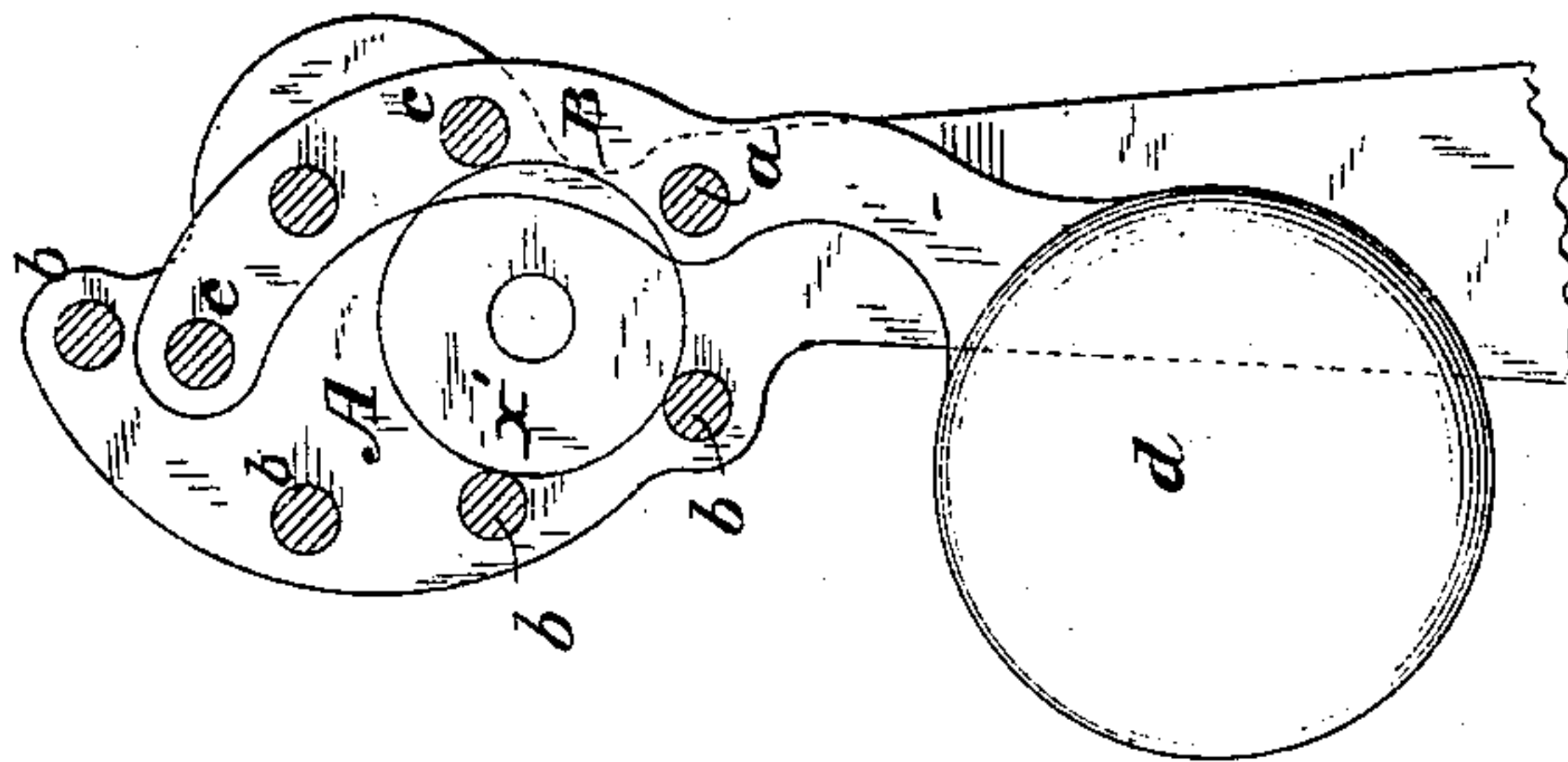


Fig. 2.

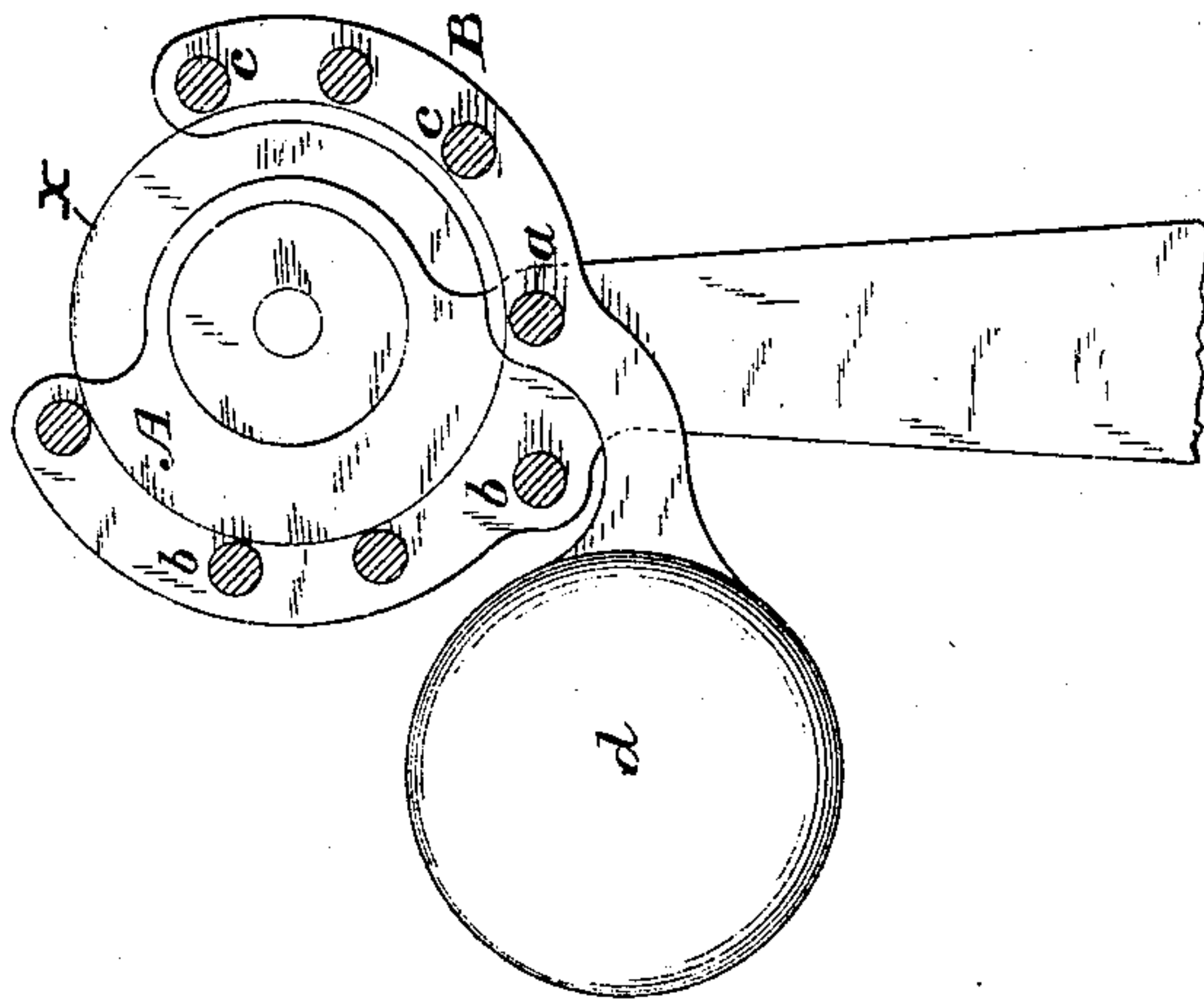
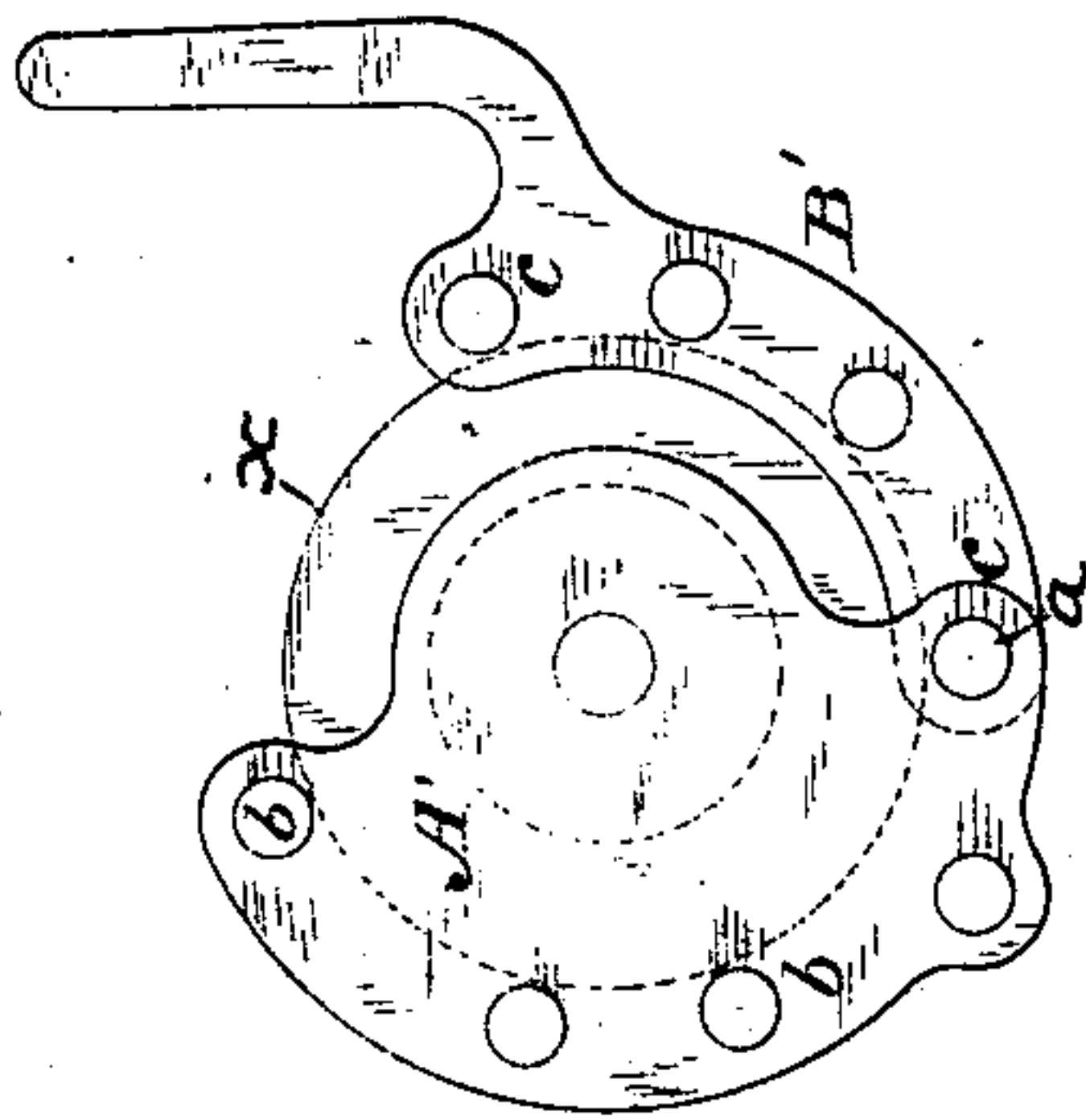


Fig. 4.



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UNITED STATES PATENT OFFICE.

ABEL T. ATHERTON, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE
PHENIX MACHINE COMPANY, OF SAME PLACE.

BOBBIN-HOLDER FOR SPOOLING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 270,721, dated January 16, 1883.

Application filed September 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, ABEL T. ATHERTON, of Lowell, in the State of Massachusetts, have invented certain new and useful Improvements in Bobbin-Holders for Spooling-Machines, of which the following is a specification.

The object I have in view is to produce a simple, inexpensive, and efficient bobbin-holder for spooling-machines.

Heretofore bobbin-holders have consisted, in some cases, of a trough or receptacle provided with centers for pivoting the bobbin, and combined with a friction-pad to act as a bobbin-brake. In other cases the holder has been provided with a rest for supporting the bobbin, and with gravitating lips or side flaps hung from above, and so arranged as to tend to press laterally upon the bobbin. In still another kind of bobbin-holder, shown in Letters Patent No. 258,567, issued to the Phenix Machine Company, a trough adapted to receive a bobbin placed loosely within it has been combined with a hinged cap, which acts as a cover and at the same time as a brake on the bobbin.

The holder in which my invention is comprised differs from all the foregoing types, as well as from all other bobbin-holders of which I have knowledge, in that the bobbin-trough, adapted to receive and hold without other support a bobbin placed loosely within it, is composed of two parts hinged or pivoted together, like the blades of a pair of scissors, at the bottom, so that they can move to and from one another. These parts constitute both the sides and the bottom of the trough or bobbin-receptacle. The bobbin rests in their crotch, and is slightly but sufficiently pressed laterally by them, so as to be steadied and prevented from undue freedom of movement. Each part consists of two end castings or pieces of the proper shape, which are connected together by longitudinal wires or slats, thus producing, when the two parts are pivoted together, an open-work basket-like or cage-like trough, from which the lint and other refuse which will gather in ordinary bobbin-holders can freely escape. The holder thus consists simply of two pairs of end plates or castings and longitudinal connecting wires or slats. The parts are weighted in such manner as to

tend to close up toward one another, thus keeping contact with the bobbin as it decreases in size during the spooling operation, and the interior opposite edges of the pivoted end plates or castings form lips or flanges, which serve to limit or prevent endwise movement of the bobbin contained in the trough.

The nature of my improvement and the manner in which the same is or may be carried into effect will be readily understood by reference to the accompanying drawings, in which—

Figure 1 represents the bobbin-holder in side elevation, and in the position which it should occupy in the spooling-machine in relation to the spindle-spool and yarn-guide, which also are represented. Fig. 2 is a cross-section of the holder, looking toward its weighted end, containing a full bobbin, *x*. Fig. 3 is a like section of the holder as it appears holding an empty bobbin, *x'*. Fig. 4 is a view of the opposite end of the holder.

A A' represent the pair of end castings or plates of one side of the bobbin-holder, and B B' represent the other pair. In this exemplification of my improvement the plate A is made fast to the machine-frame, and constitutes the supporting leg or stand of the holder, as indicated in Fig. 1. The two sets of plates, A B, A' B', at each end of the bobbin-holder, are pivoted together upon a common axis or rod, *a*. The parts A A' are connected by longitudinal wires or slats *b*, placed, say, a quarter of an inch apart, and the parts B B' are connected in like manner by slats or wires *c*. These slats or wires are of sufficient number to form the sides of the trough, which thus has a basket or cage like formation. The bobbin rests in the crotch of the pivoted sides, and is pressed lightly by the slats or wires. For this purpose the piece B is prolonged below the pivot *a*, as indicated at *d*, and has an excess of metal in its prolonged end, so that its preponderating weight shall cause the side B B' to tend to shut or close up toward the other side, A A', of the cage-like trough.

I can, if desired, use an adjustable weight on the end *d*; but this in practice will not generally be necessary. The wires or slats on each side are set on a curve in the end plates, thus giving the necessary belly to the trough; and the interior opposite edges of the plates

at each end project inwardly some distance beyond the lines of wires, so as to form end flanges or lips, which sufficiently close the ends of the trough against the escape there-
5 through of the bobbin.

I thus obtain a bobbin-holding trough which is divided vertically and longitudinally into two parts or sections pivoted together at the bottom of the trough, and so weighted that they
10 tend to close up together or toward one another, and this feature I believe to be new with me.

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

1. In a bobbin-holder for spooling-machines,
15 a bobbin-containing trough adapted to receive and hold without other support a bobbin placed loosely within it, divided vertically and longitudinally into two parts or sections, pivoted together at the bottom of the trough, and

weighted so that the one section shall tend to
20 close up toward the other, as hereinbefore set forth.

2. A bobbin-holder for spooling-machines, consisting of two parts or sections, each composed of end pieces united or connected by
25 longitudinal wires or slats, pivoted together at the bottom, so as to form both the bottom and the sides of a cage-like trough, and weighted so that the one part shall tend to close up toward the other part, substantially as and for
30 the purposes hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 3d day of August, A. D. 1882.

ABEL T. ATHERTON.

Witnesses:

M. BAILEY,
F. COBURN.