

No. 614,488.

Patented Nov. 22, 1898.

W. E. MORTON.
BOBBIN HOLDER.

(Application filed May 24, 1898.)

(No Model.)

Fig. 1

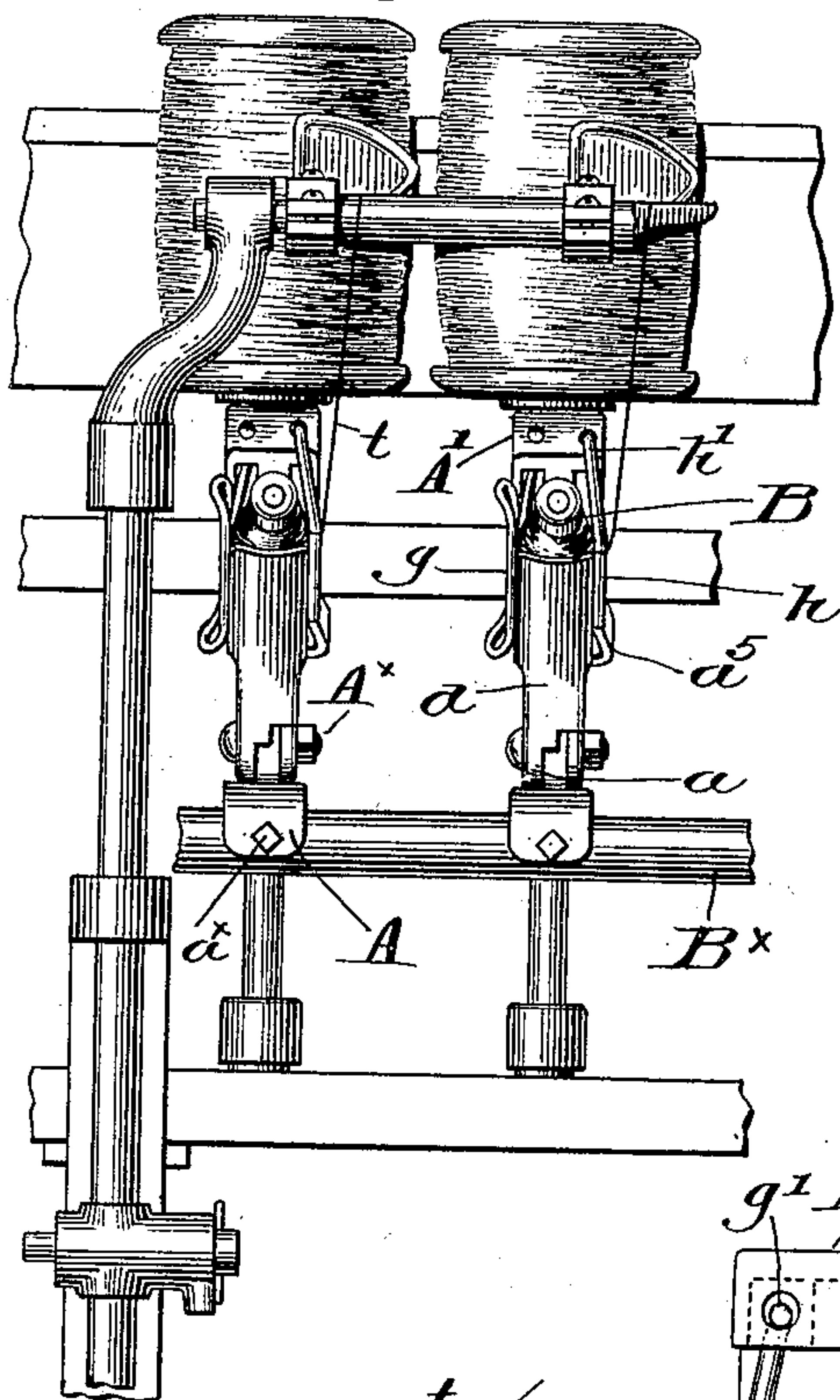


Fig. 2

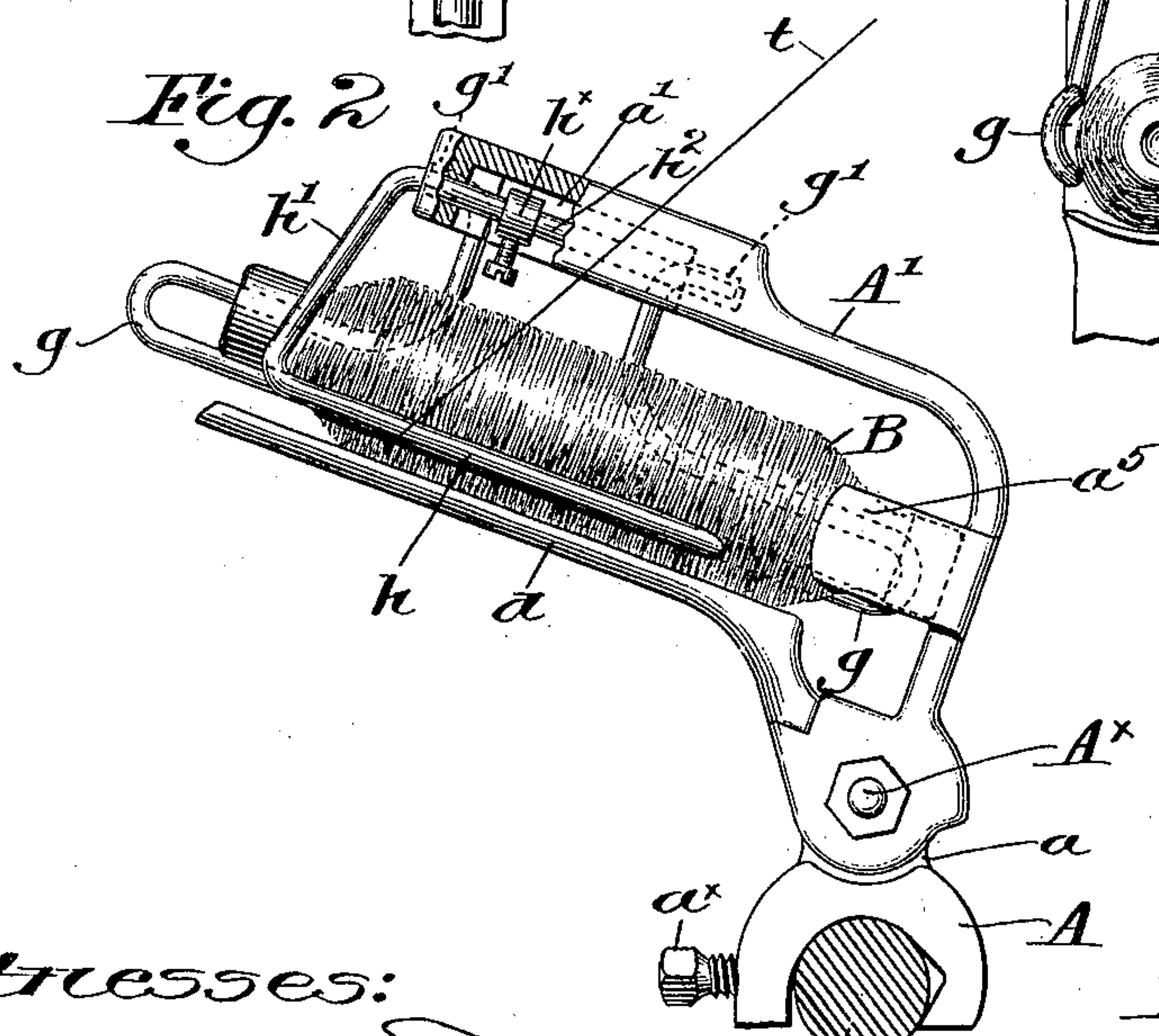
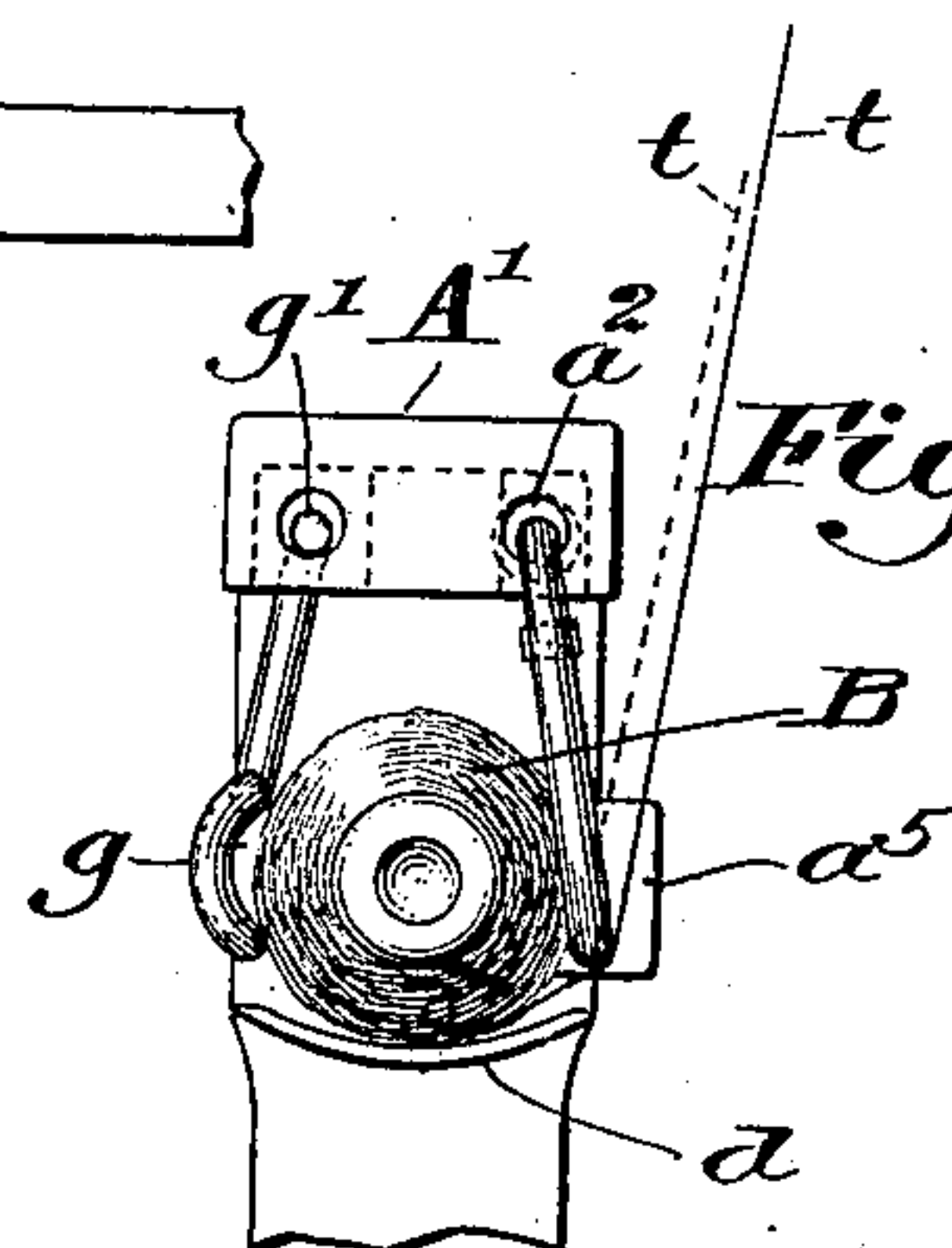


Fig. 3



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UNITED STATES PATENT OFFICE.

WORTHINGTON E. MORTON, OF CLOVER, SOUTH CAROLINA, ASSIGNOR OF ONE-HALF TO THE DRAPER COMPANY, OF PORTLAND, MAINE, AND HOPEDALE, MASSACHUSETTS.

BOBBIN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 614,488, dated November 22, 1898.

Application filed May 24, 1898. Serial No. 681,622. (No model.)

To all whom it may concern:

Be it known that I, WORTHINGTON E. MORTON, of Clover, county of York, State of South Carolina, have invented an Improvement in Bobbin-Holders, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a bobbin-holder comprising certain novel features of construction, as will be hereinafter described in the specification and particularly pointed out in the claims.

The bobbin-holder embodies in its construction some of the features and the general arrangement of parts shown and described in United States Patent No. 575,929, dated January 26, 1897.

Figure 1 is a front elevation of a portion of a spooling-machine with bobbin-holders embodying my invention in operative position. Fig. 2 is an enlarged right-hand side elevation, partly broken out, of one of the bobbin-holders shown in Fig. 1; and Fig. 3 is a partial outer end elevation thereof.

The clamp A, provided with a set-screw a^x to retain the bobbin-holder in place on the supporting-bar B^x of the spooler, has an upturned ear a , to which the pan d and overhanging arm A' are pivotally connected by a suitable bolt A^x . The pan or rest d is transversely convex to support the bobbin B, and the enlarged outer end of the arm A' is chambered at a' to receive the bent ends g' of a wire guard g , which depends along one side of the bobbin.

In the patent referred to like guards g depend at each side of the bobbin, the ends of the guards extending beyond the bobbin, the yarn always running on the outside of the wire in consequence, and considerable friction is thus generated by turning around the lower edge of the guard. In my present invention the guard at one side is free or open at one end and is shorter than the bobbin, and, as best shown in Fig. 2, this guard is shown as a wire having a straight portion h running alongside the bobbin, preferably from its outer end toward its inner end and bent up at its outer end at h' , after which the wire is again

bent rearwardly at h^2 to enter a hole a^2 in the outer end of the arm A' , passing through the recess a' into a socket in the arm. A collar h^x on the fulcrum or supporting portion h^2 of the guard prevents its displacement, said collar being located in the recess a' .

In use the yarn t at first runs on the outside of the open guard along the portion h (see Figs. 2 and 3) until in unwinding it reaches the inner end of the bobbin, where it runs off the free or open end of the guard and thereafter runs on the inside of the guard, as shown in Fig. 1 and by dotted lines, Fig. 3, until the bobbin is wound off.

By running inside the guard the yarn pulls directly from the bobbin, which is very advantageous on fine yarns, as there is less friction, and consequently less tendency to break.

The open-ended guard serves to position the bobbin on the rest d precisely as if it were of the construction of the guard g on the opposite side.

A stop a^5 , shown as a lug or ear on the upright portion of the overhanging arm A' , extends alongside the inner end of the bobbin at the inner end of the open guard and serves to steady the bobbin.

Having fully described my invention, what I claim is—

1. In a bobbin-holder, a rest for the bobbin, and a movable guard at the side of the bobbin, supported at one end and free or open at its other end, to permit the yarn in unwinding to pass between the guard and bobbin at the free or open end of the former.

2. In a bobbin-holder, a rest for the bobbin, and laterally-movable guards at the sides of the bobbin, one of said guards being free or open at one end, to permit the yarn in unwinding to pass between the said guard and bobbin at the free or open end of the former.

3. In a bobbin-holder, a rest for the bobbin, a pivotally-mounted guard at the side of the bobbin and free or open at one end, to permit the yarn in unwinding to pass between the guard and bobbin at the free or open end of the former, and a fixed side stop for the bobbin near the open end of the guard.

4. In a bobbin-holder, a rest for the bobbin, an overhanging arm, and a side guard for the

bobbin, having at one end a bearing on the arm and open or free at its other end, to permit the yarn to pass from the outer to the inner side of the guard in unwinding.

- 5 5. In a bobbin-holder, a bobbin rest or support, two pivotally-mounted, laterally-movable side guards for the bobbin, one of said guards being closed at one end and free or open at the other end, to permit the yarn to
10 pass from the outer to the inner side of the guard in unwinding, and a fixed stop for the bobbin near the open end of said guard.

6. In a bobbin-holder, a bobbin rest or support, a movable side guard for the bobbin when in the holder, and a side stop for the lower end of the bobbin independent of the movable side guard. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WORTHINGTON E. MORTON.

Witnesses:

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