

(No Model.)

J. GARSED.

STOP MOTION DEVICE FOR SPOOLING MACHINES.

No. 297,252.

Patented Apr. 22, 1884.

FIG 1

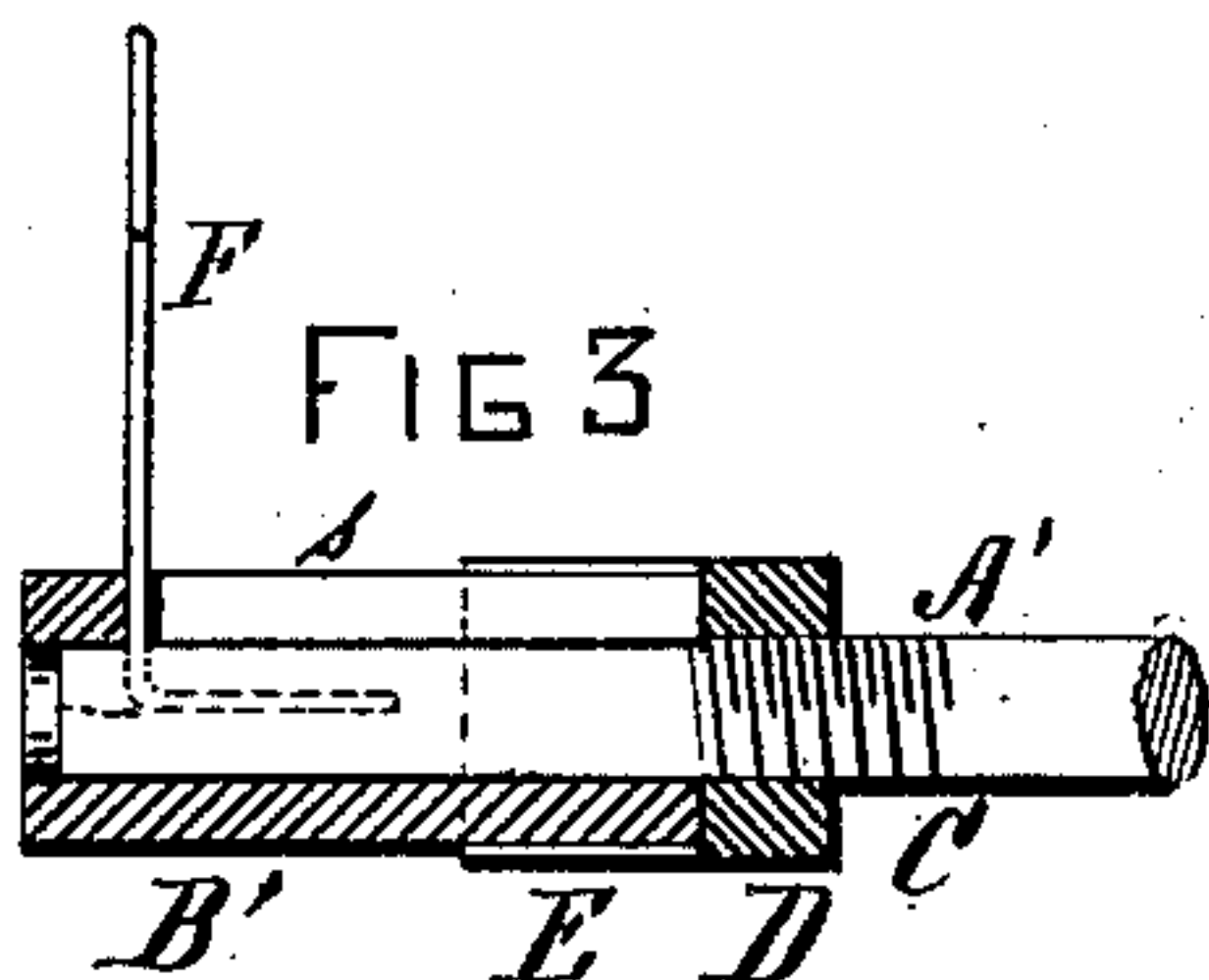
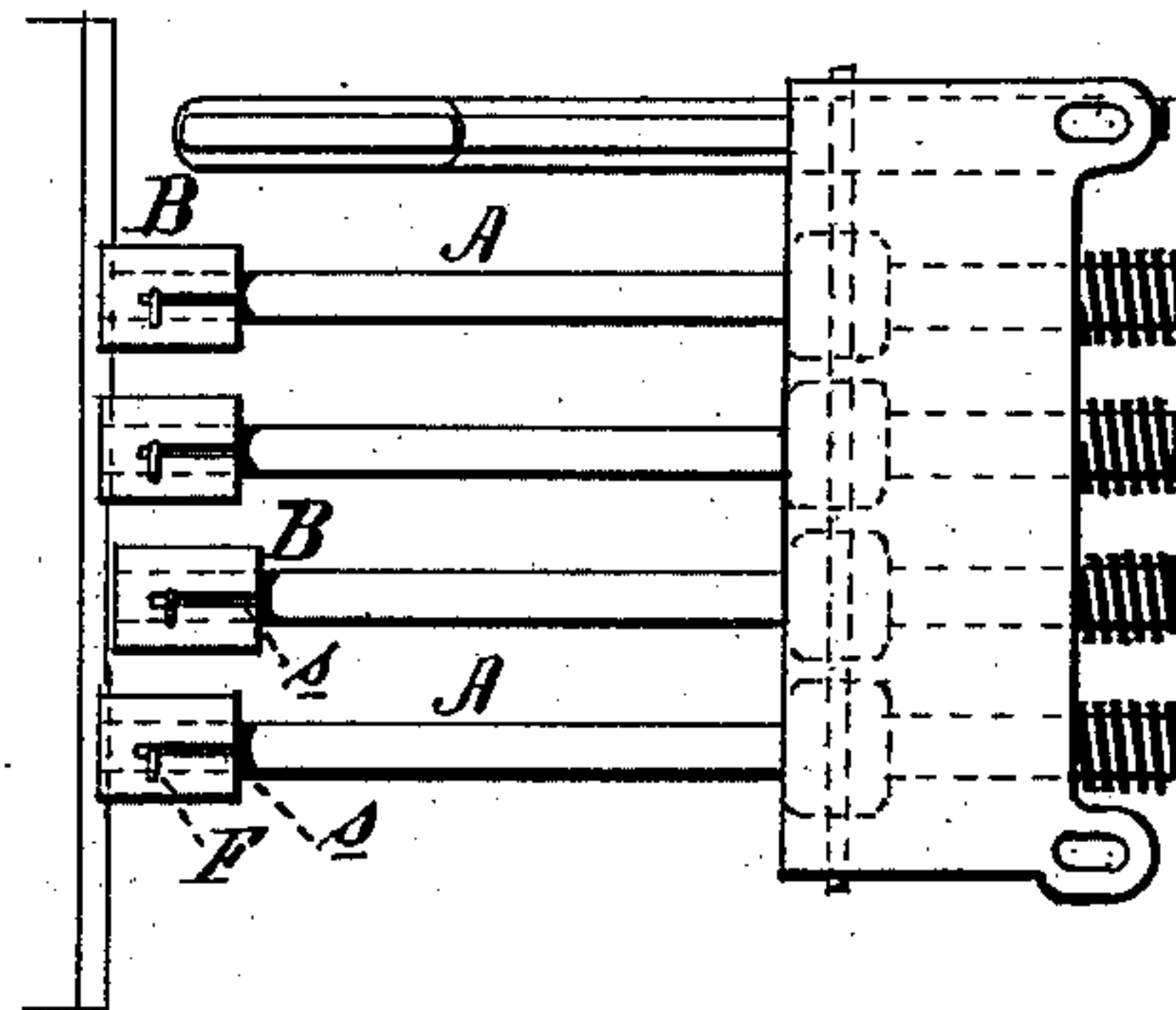


FIG 4

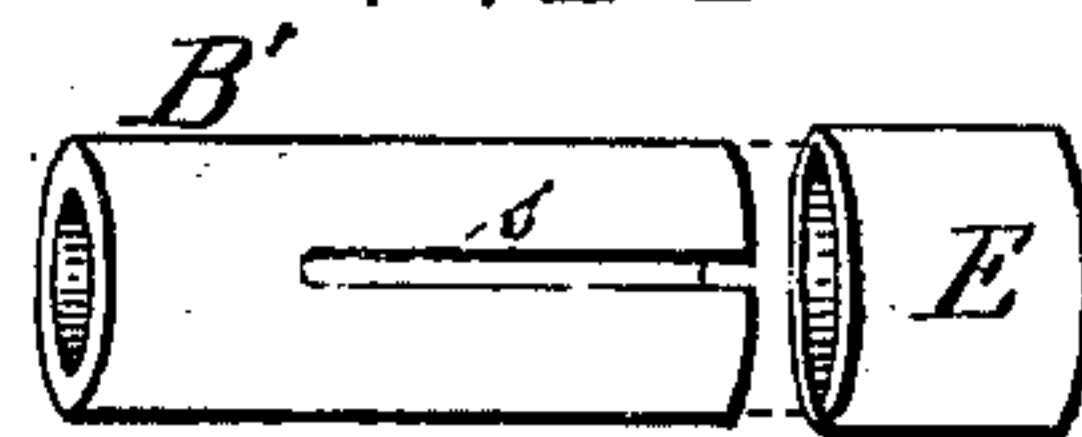


FIG 2

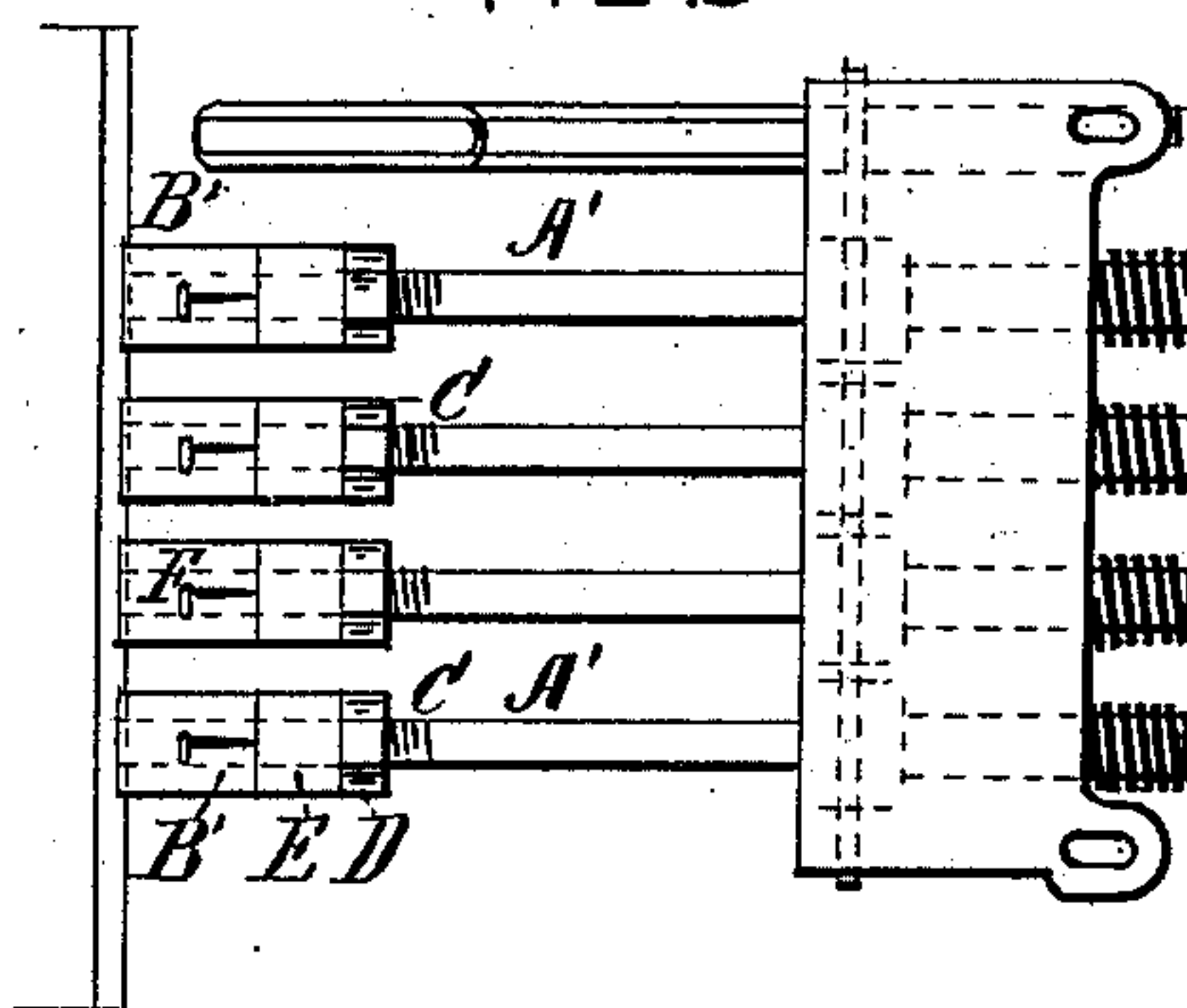
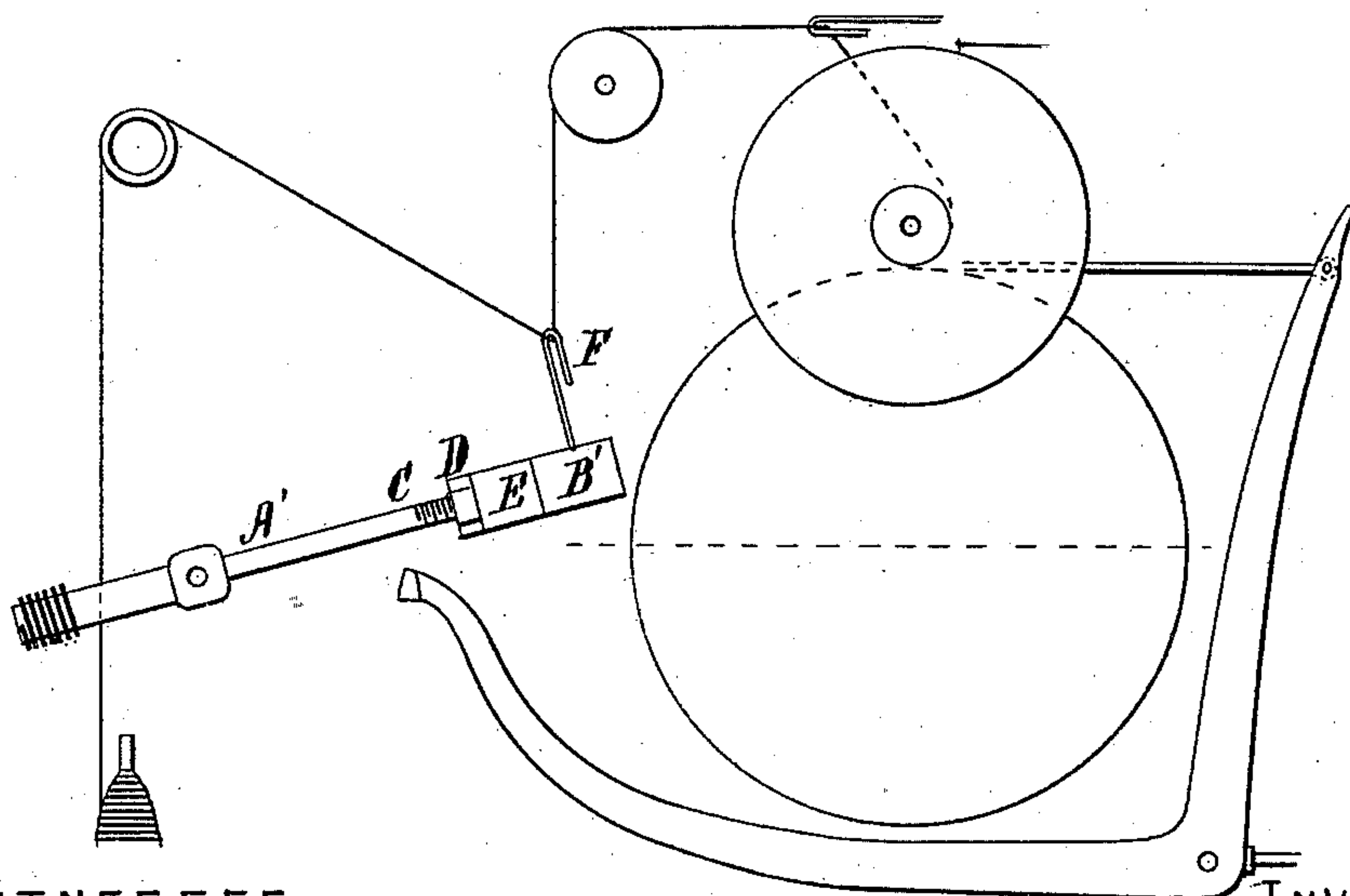


FIG 5



WITNESSES.
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UNITED STATES PATENT OFFICE.

JOHN GARSED, OF PHILADELPHIA, PENNSYLVANIA.

STOP-MOTION DEVICE FOR SPOOLING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 297,252, dated April 22, 1884.

Application filed March 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN GARSED, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain
5 new and useful Improvements in Stop-Motion Devices for Spooling-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such
10 as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates more particularly to
15 the stop-motion devices for spooling-machines patented to J. and T. A. Boyd, January 18, 1881, No. 236,767, although it may be adapted to other spooling-machines. The stop-motion devices in the Boyd spooler consist
20 in part of a series of light detector-levers pivoted in sets of four to brackets underneath a longitudinal rail, with their inner ends, which extend toward the driving-drum, provided with rubber pieces to increase the friction
25 when brought in contact with the said drum. These frictional pieces, which consist of short sections of rubber tubing, are slipped over the ends of the levers and should be retained close to the driving-drum without being in actual
30 contact; but they are liable to drop off or work back on the levers, and require considerable attention on the part of the attendant to keep them in proper position for the driving-drum to act the instant a thread breaks or is ex-
35 hausted from the cop or bobbin. In spooling yarn care should be exercised to keep the threads intact, especially where two or more threads of different colors are run onto one spool. Should one of the threads break and the
40 detector-lever fail to act or the attendant neglect it, the yarn from the remaining cops would still continue to pass onto the spool, while this one particular color would be left off and would tend to mar the finish of the goods when
45 the yarn is woven. To correct this the attendant is obliged to remove all the yarn from the spool until the broken end is found. In my invention the india-rubber pieces or tips are adjusted by means of screw-threads formed
50 on the detector levers or fingers and corresponding screw-nuts, so that they can be read-

ily and accurately adjusted, and will so retain their proper position relative to the driving-drum as to insure prompt action on the breaking of a thread or upon the thread becoming
55 exhausted from the cop or bobbin. I also employ a sheet-metal sleeve, which is passed over the end of the india-rubber tube or tip adjacent to the screw-nut, for the purpose of closing the slot made at this end to accommo-
60 date the hooks or curls which are attached to the detector levers.

Reference is had to the accompanying drawings, in which Figure 1 is a plan view of a set of detector-levers employed on the Boyd spool-
65 er. Fig. 2 is a plan view of the same, showing the india-rubber tubes or tips adjusted by means of my invention. Fig. 3 is a longitudinal section of my invention. Fig. 4 is a perspective view of one of the india-rubber tubes
70 or tips, and also one of the sleeves used in my invention. Fig. 5 is an end elevation of the stop-motion as employed on the Boyd spooling-machine, showing one of the detector-levers with my invention applied.

A A, Fig. 1, are the detector-levers, and B
75 B are the india-rubber tubes or tips used, as stated, on the Boyd spooler. It will be observed that each tube or tip is provided with a longitudinal slot, s, in one end to admit the
80 hook or curl F, and that they are merely slipped over the ends of the levers, depending upon the contraction of the rubber to keep them in place; but it has been found that they are liable to shift their position and frequent-
85 ly to drop off. The attendant is also liable to press them too far back on the lever for the drum to act.

The detector-levers A' A', Fig. 2, in my invention are each furnished at the proper dis-
90 tance from the inner ends with screw-threads C and a nut, D. The screw-threads can be formed on the levers before the nuts are put on; or the nuts themselves will cut the threads, owing to the fact that the levers are made of
95 wood.

E, Figs. 3 and 4, is a sheet-metal sleeve made to slip over the slotted end of the india-rubber tube or tip B', to close the slot s around
100 the guide hook or curl F, and assist in retaining the tube or tip on the lever.

The nuts D are screwed onto the levers a

proper distance from the inner ends of the same to accommodate the tubes or tips B, and after these are slipped on the nuts are adjusted so as to bring them all in line and present
5 the ends of the tubes or tips evenly to the driving-drum, in which position they will be retained to be acted upon should a thread break or become exhausted from the cop or bobbin.

I do not wish to claim, broadly, the detector-
10 or-levers or the india-rubber tubes or tips on the end of the same; but

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

1. The combination of the detector-lever A,
15 provided with screw-threads C, with the nut

D and india-rubber tube or tip B', substantially as and for the purpose specified.

2. The combination of the india-rubber tube or tip B' and metal sleeve E with the lever A, provided with screw-threads C and nut D, 20 substantially as and for the purpose shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of March, 1883.

JOHN GARSED.

Witnesses:

FRANCIS S. BROWN,
ISAAC R. OAKFORD.