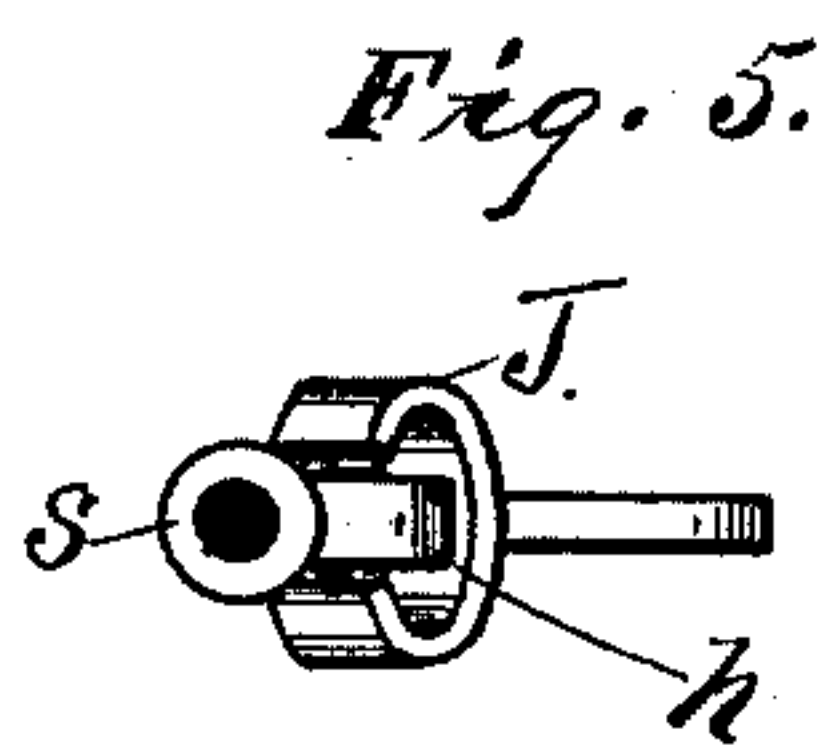
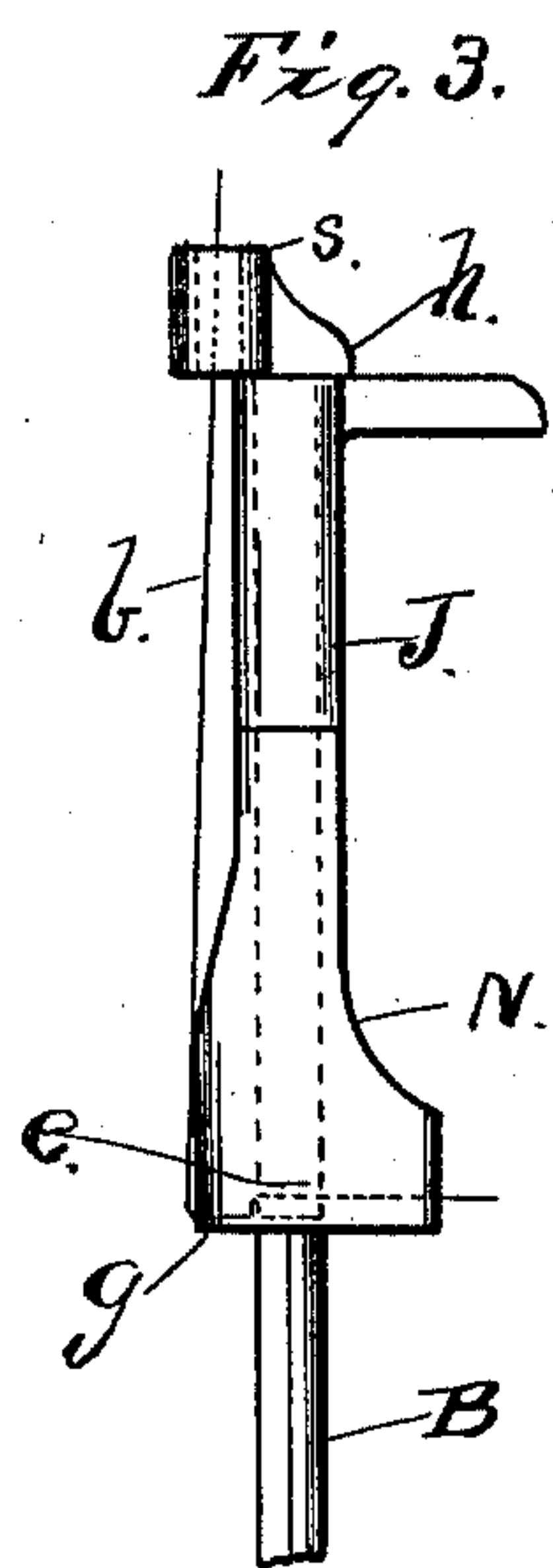
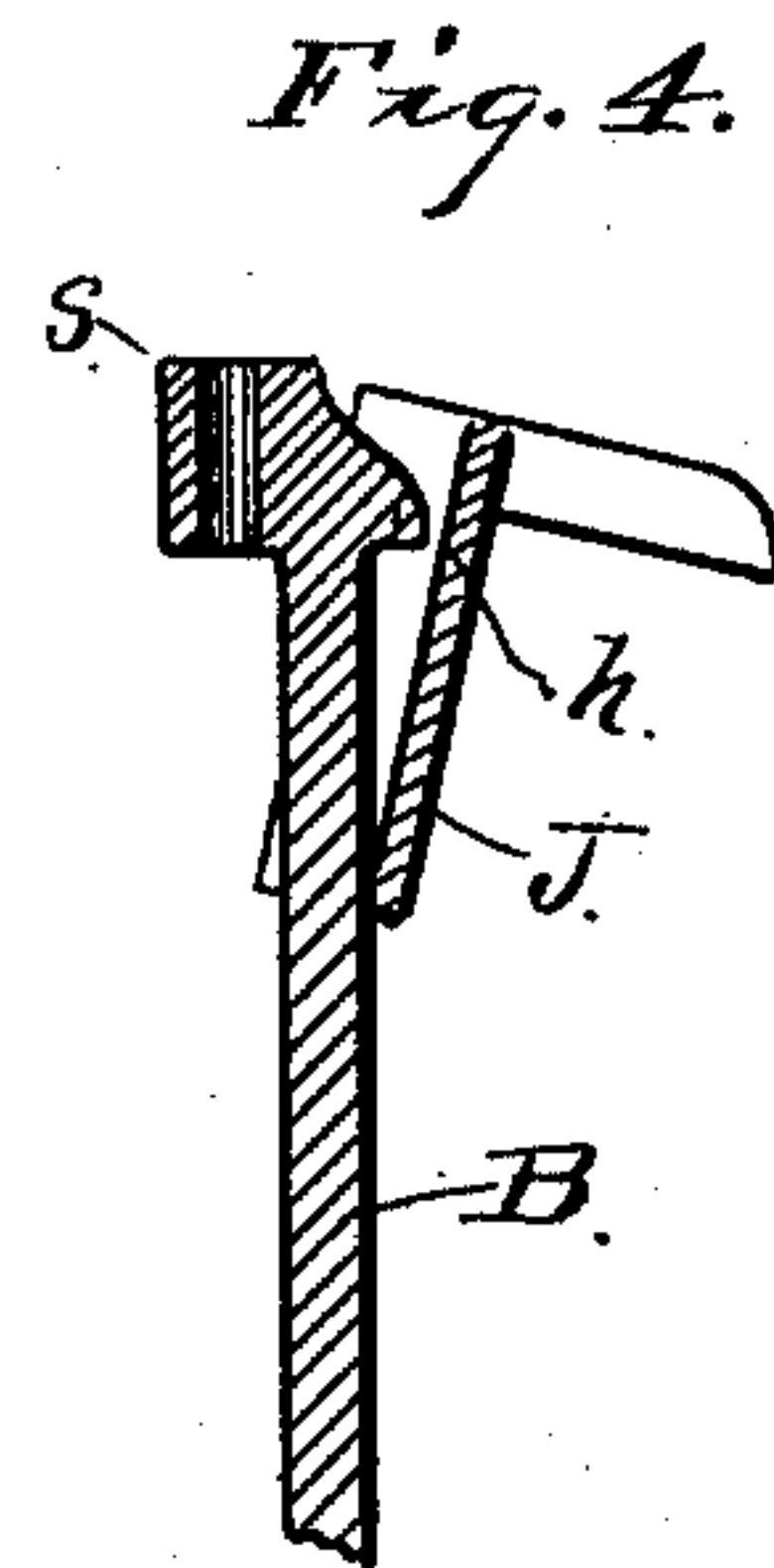
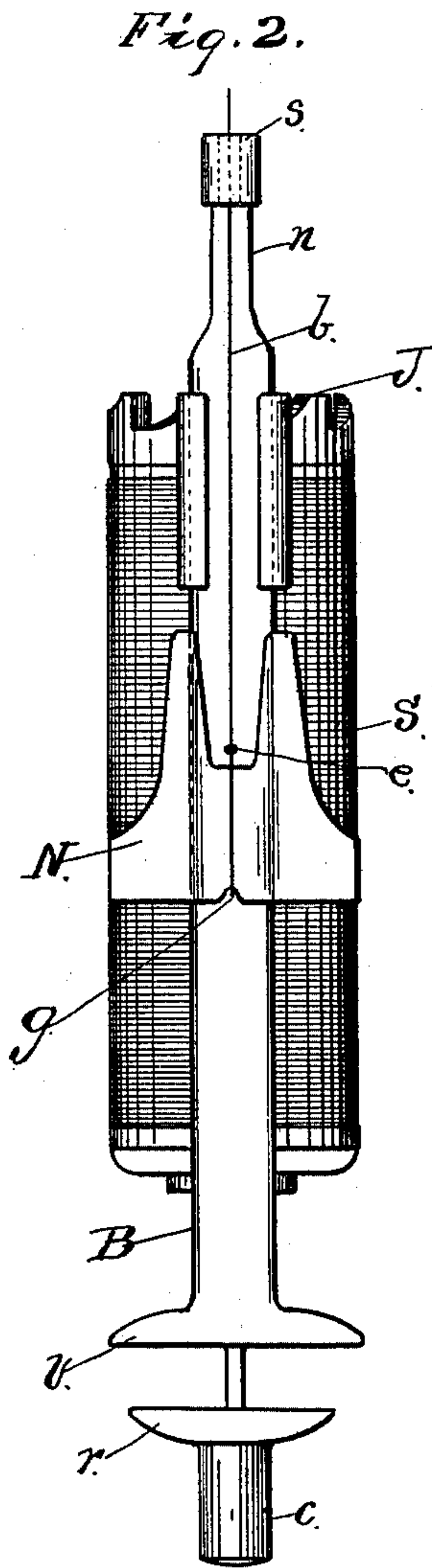
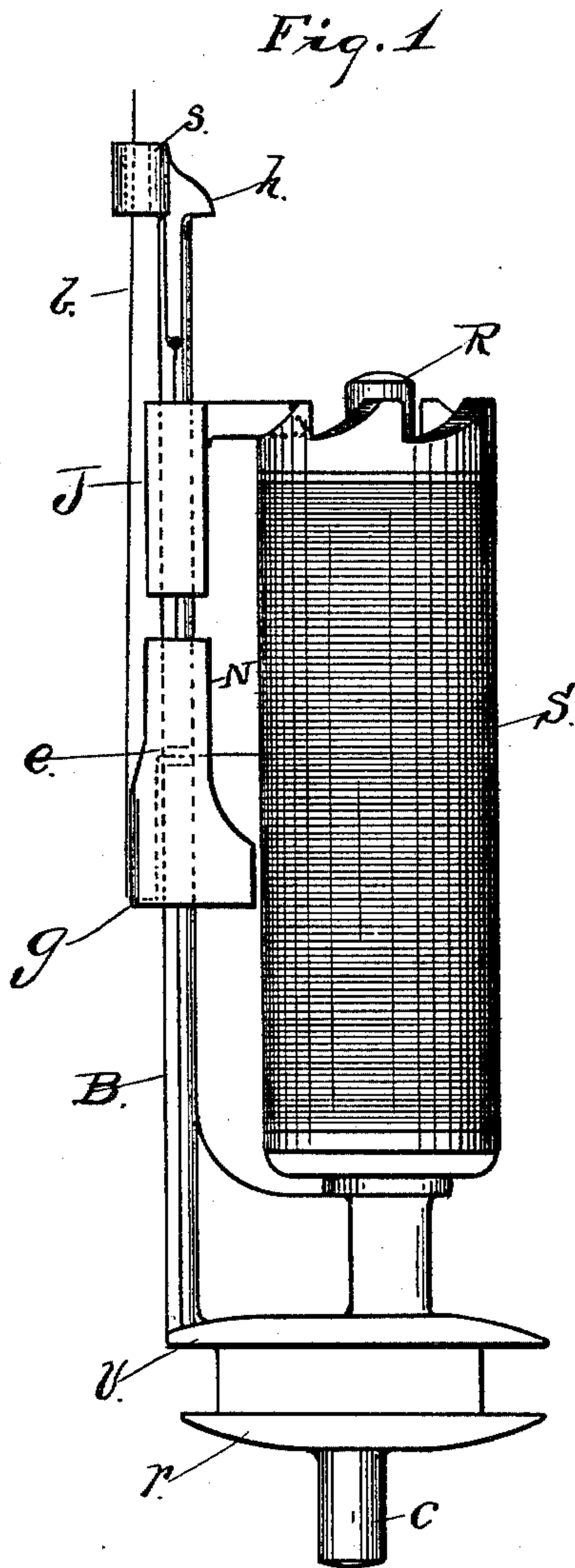


(No Model.)

J. McCAHEY.  
BRAIDING CARRIER.

No. 592,477.

Patented Oct. 26, 1897.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN McCAHEY, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE NEW ENGLAND BUTT COMPANY, OF SAME PLACE.

## BRAIDING-CARRIER.

SPECIFICATION forming part of Letters Patent No. 592,477, dated October 26, 1897.

Application filed January 15, 1897. Serial No. 619,336. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN McCAHEY, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Spool-Carriers for Braiding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the spool-carriers used in braiding-machines. It is fully explained and illustrated in this specification and the accompanying drawings.

Figure 1 represents a side elevation of a spool-carrier for braiding-machines. Fig. 2 is a back elevation of the carrier. Figs. 3, 4, and 5 are respectively a side elevation, a vertical section, and a top view of the upper part of the carrier explanatory of its mode of operation.

The object of the invention is to provide a simple way of preventing the pawl that controls the rotation of the yarn-spool from being thrown off at the top of the standard on which it slides by any sudden upward motion of the tension-weight on the standard below it. This sudden rise of the weight is apt to occur when the carrier passes quickly from the inner raceway to the outer raceway in running the machine fast.

In the drawings, B is the standard of the carrier.

J is the pawl that checks the rotation of the spool, and N is the tension-weight, both of which slide up and down freely on the standard B.

S is the yarn-spool, held on spindle R. At the lower end of the carrier *v* is the foot-flange that slides on the top plate of the machine. *r* is the flange that slides on the under side of said top plate, and *c* is the stud by which the carrier is driven.

To prevent the pawl J from being thrown off, as before described, a projection *h* is cast on the front side of the top of the standard B, against which the pawl will strike when it rises high enough.

The course of the yarn *b* is from the spool S through the hole *e* in the standard B, then down under the tension-weight N, through

the notch *g* in the back of the weight. (See Fig. 2.) Then it passes up through the top guide *s* to the fabric. In this way the weight N hangs in the bight of the yarn *b*, taking up and letting out any slack that is made in the yarn by the motion of the carrier in toward the center or out on the plate. Now if the upper end of the yarn is drawn on suddenly by the carrier moving from the inner raceway to the outer raceway it will jerk the weight up against the pawl and throw it off of the standard, and when the thread has been improperly wound on the spool and drawn in at the lower coil, so as to catch in unwinding, the jerk will also throw the spool off of the spindle or raise it up so high on the spindle as to cause it to break down all the other yarns as it passes under them. This is prevented by the projection *h*, against which the pawl strikes when raised clear up by the weight or the spool and does not allow it to come off, but instead it only breaks the yarn and lets the weight drop, which stops the machine. (See Fig. 3.) When it is necessary to take the pawl off of the standard to change an empty spool for a full one, raise the pawl up and tip the upper end of it over toward the spool, to allow which each side of the standard B is cut away at *n* for a short distance down from the guide *s* to make it narrow enough to allow the slot in the back of the pawl to pass over it, so that it can be slid up off of the standard. (See Fig. 4.) By reversing these motions the pawl can be put on the standard again.

Having thus described my improvement, I claim as my invention and desire to secure by Letters Patent—

In a spool-carrier, a standard having a projection made at its top to prevent the pawl from being thrown off by the tension-weight or spool and having its sides narrowed away at the top to allow the pawl to be removed by tipping it over toward the spool, in combination with, a pawl, a tension-weight and a spindle for a spool, substantially as described.

In testimony whereof I have hereunto set my hand.

JOHN McCAHEY.

In presence of—

MATTIE E. LAWTON,  
BENJ. ARNOLD.