

No. 704,604.

Patented July 15, 1902.

L. V. WARNER.
SPRING DRAFT ATTACHMENT.

(Application filed Apr. 26, 1902.)

(No Model.)

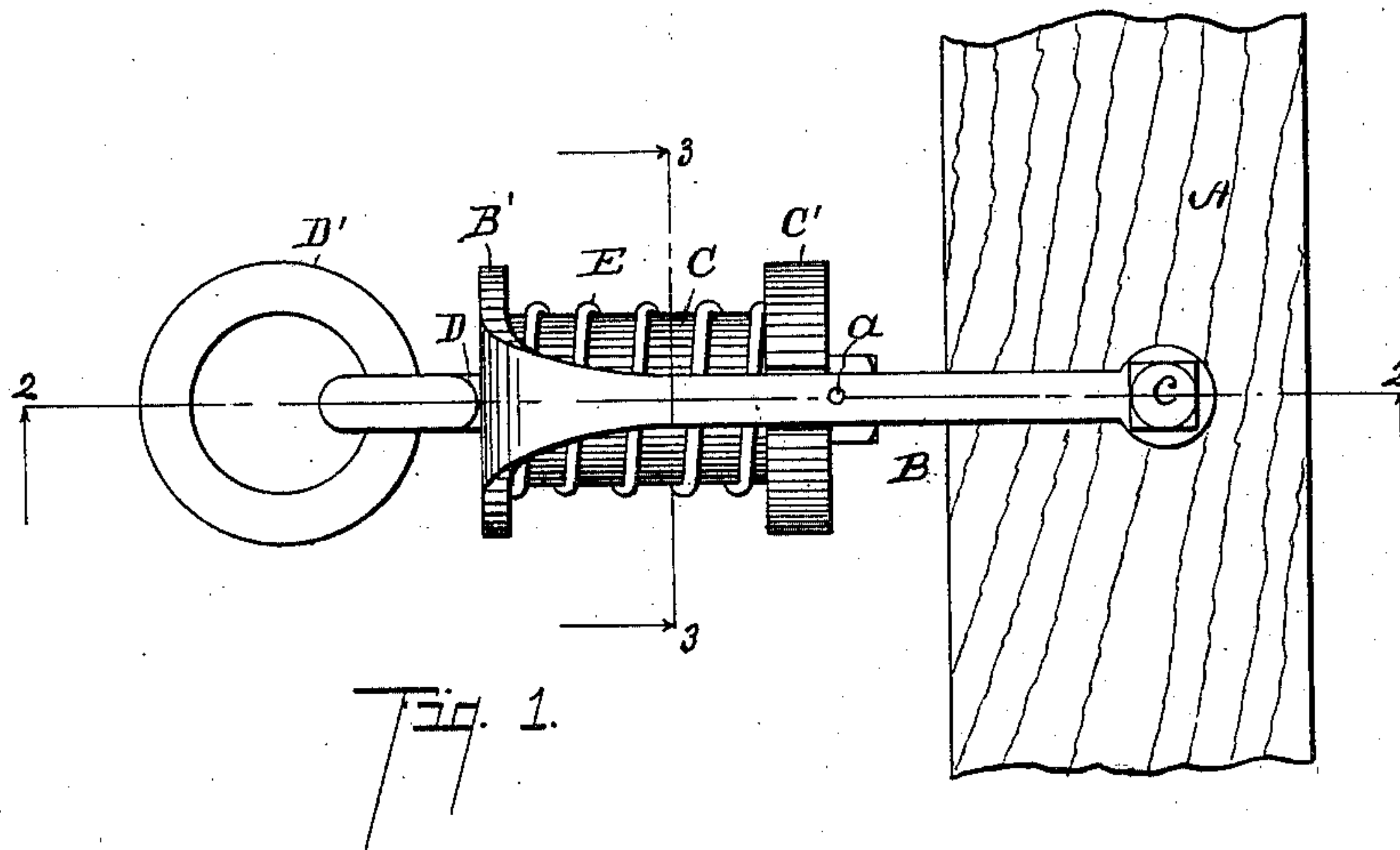


Fig. 1.

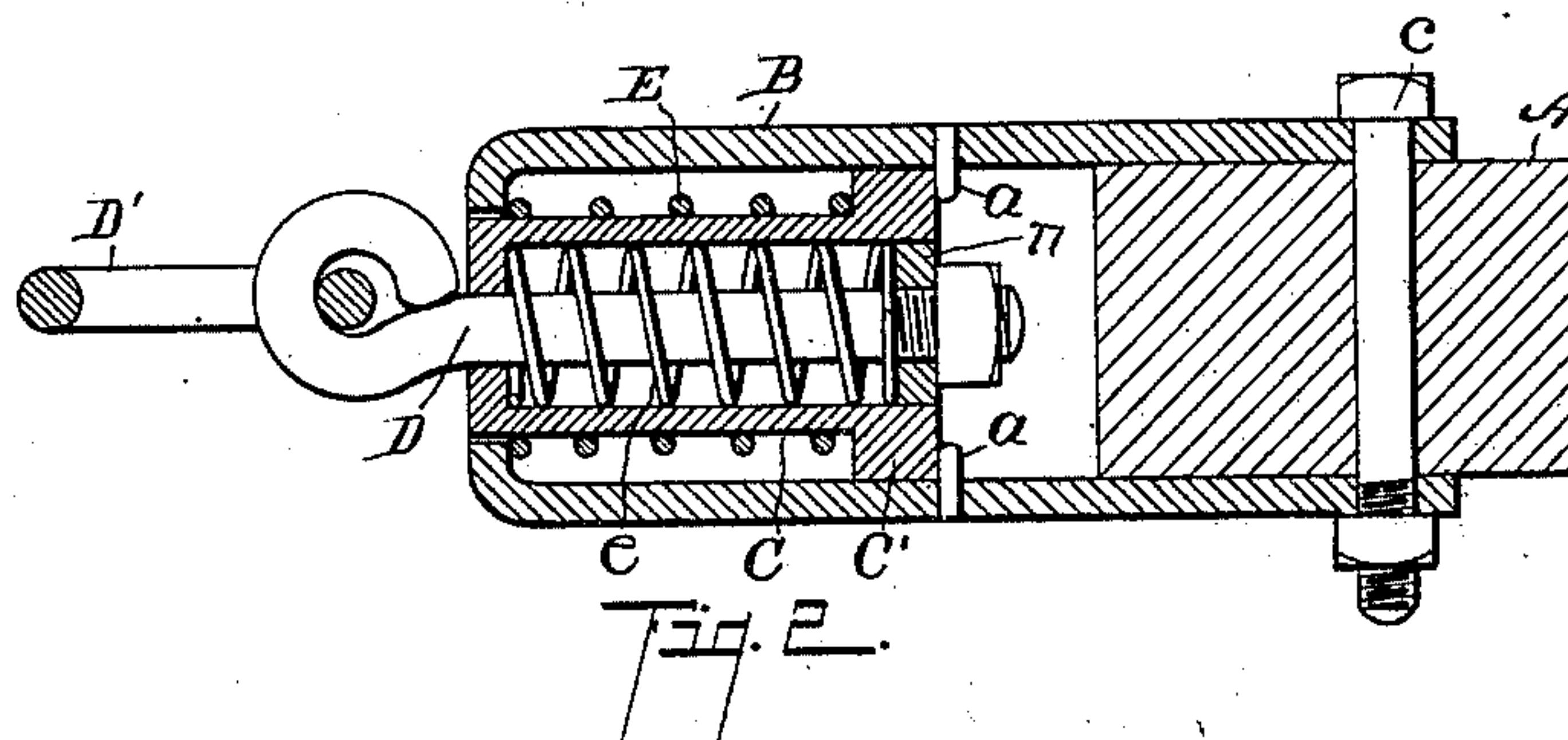


Fig. 2.

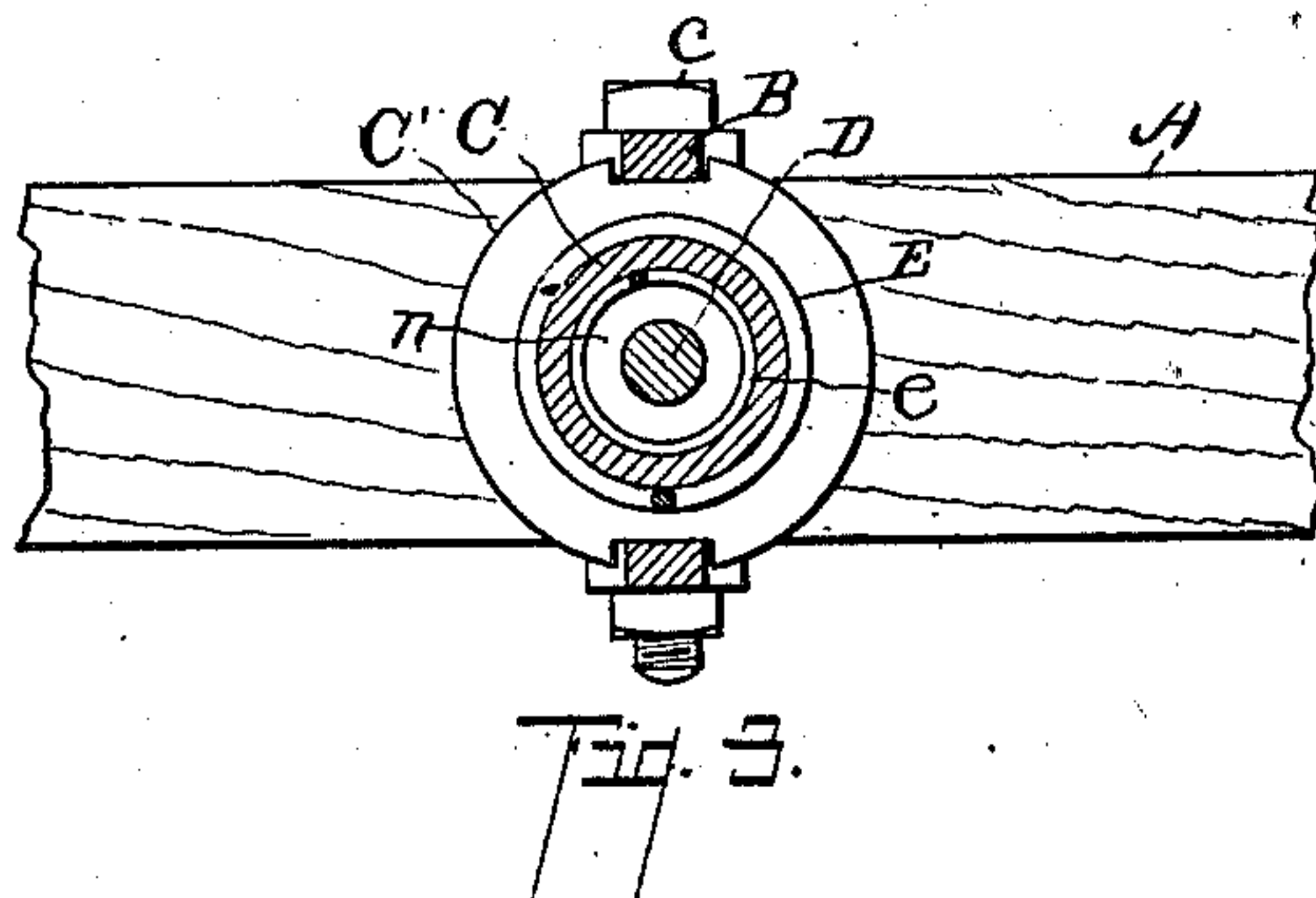


Fig. 3.

Witnesses:

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Att'y.

UNITED STATES PATENT OFFICE.

LORIN V. WARNER, OF CASSOPOLIS, MICHIGAN.

SPRING DRAFT ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 704,604, dated July 15, 1902.

Application filed April 26, 1902. Serial No. 104,810. (No model.)

To all whom it may concern:

Be it known that I, LORIN V. WARNER, a citizen of the United States, residing at the village of Cassopolis, in the county of Cass and State of Michigan, have invented certain new and useful Improvements in Spring Draft Attachments, of which the following is a specification.

This invention relates to improvements in spring draft attachments.

The object of this invention is to simplify the construction of spring draft attachments or clevises and produce a structure which shall be light and economical to manufacture and at the same time durable in use.

Further objects will definitely appear in the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is fully illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of a structure embodying the features of my invention. Fig. 2 is a detail longitudinal sectional view taken on line 2 2 of Fig. 1. Fig. 3 is a detail cross-sectional view taken on line 3 3 of Fig. 1.

In the drawings all of the sectional views are taken looking in the direction of the little arrows at the ends of the sectional lines, and similar letters of reference refer to the similar parts throughout the several views.

Referring to the lettered parts of the drawings, A represents a bar, evener, or the like.

B is a yoke shaped like the usual form of clevis, having an enlargement B'.

The device may be attached to a bar, as A, or the like by a bolt, as c.

A casing or cylinder C is arranged to reciprocate within the yoke, the flange or enlargement C' at the lower end of the casing being grooved to engage the arms of the yoke to guide the casing and retain it within the yoke. About the casing is a coiled spring E, one end of which rests on the flange C' on the casing and the opposite end against the head B' of the yoke. Stops a are provided on the yoke to retain the same within it. A plunger D

is adapted to reciprocate in the casing, and this plunger is provided with suitable means for the attachment of the device, as the ring D'. About the plunger, within the casing or cylinder C, is a coiled spring e, one end of which rests against the head n, carried by the plunger, and the other against the end of the casing. The spring e is of greater strength than the spring E, so that the device is practical for use for both light and heavy loads, the spring E only being sufficient for a light load, and the spring e is brought into use for heavier loads. The device is therefore adapted for use under all conditions.

It will be observed that the structure is very compact and simple in its structure.

I have illustrated and described my improved draft-spring in the form I believe to be the most practical. There are, however, numerous structural variations which will readily appear to those skilled in the art to which my invention appertains. By this arrangement of the parts a very practical device is secured.

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

1. In a spring draft device, the combination of a yoke B; a casing C arranged to reciprocate in said yoke and having a flange C' grooved to engage the arms of the yoke and be guided thereby; stops a on the said yoke; a coiled spring E about said casing adapted to engage said yoke; a bolt D adapted to reciprocate in said casing; a spring e about said bolt adapted to engage said casing, said springs E and e being of varying strength; all coacting for the purpose specified.

2. In a spring draft device, the combination of a yoke B; a casing C arranged to reciprocate in said yoke and having a flange C' grooved to engage the arms of the yoke and be guided thereby; stops a on said yoke; a coiled spring E about said casing adapted to engage said yoke; a bolt D adapted to reciprocate in said casing; a spring e about said bolt adapted to engage said casing, all coacting for the purpose specified.

3. In a spring draft device, the combination of a yoke; a casing arranged to reciprocate therein and be guided thereby; a coiled spring about said casing adapted to engage

said yoke; a plunger adapted to reciprocate in said casing; a spring about said plunger adapted to engage said casing, said springs being of varying strength, all coacting for the purpose specified.

4. In a spring draft device, the combination of a yoke; a casing arranged to reciprocate therein and be guided thereby; a coiled spring about said casing adapted to engage said yoke; a plunger adapted to reciprocate

in said casing; a spring about said plunger adapted to engage said casing, all coacting for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

LORIN V. WARNER. [L. S.]

Witnesses:

ZERELDA WARNER,

MARY RICH.