

J. P. HOLTZHouser.

CHAIN BOLT.

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919,581.

Patented Apr. 27, 1909.

Fig. 1.

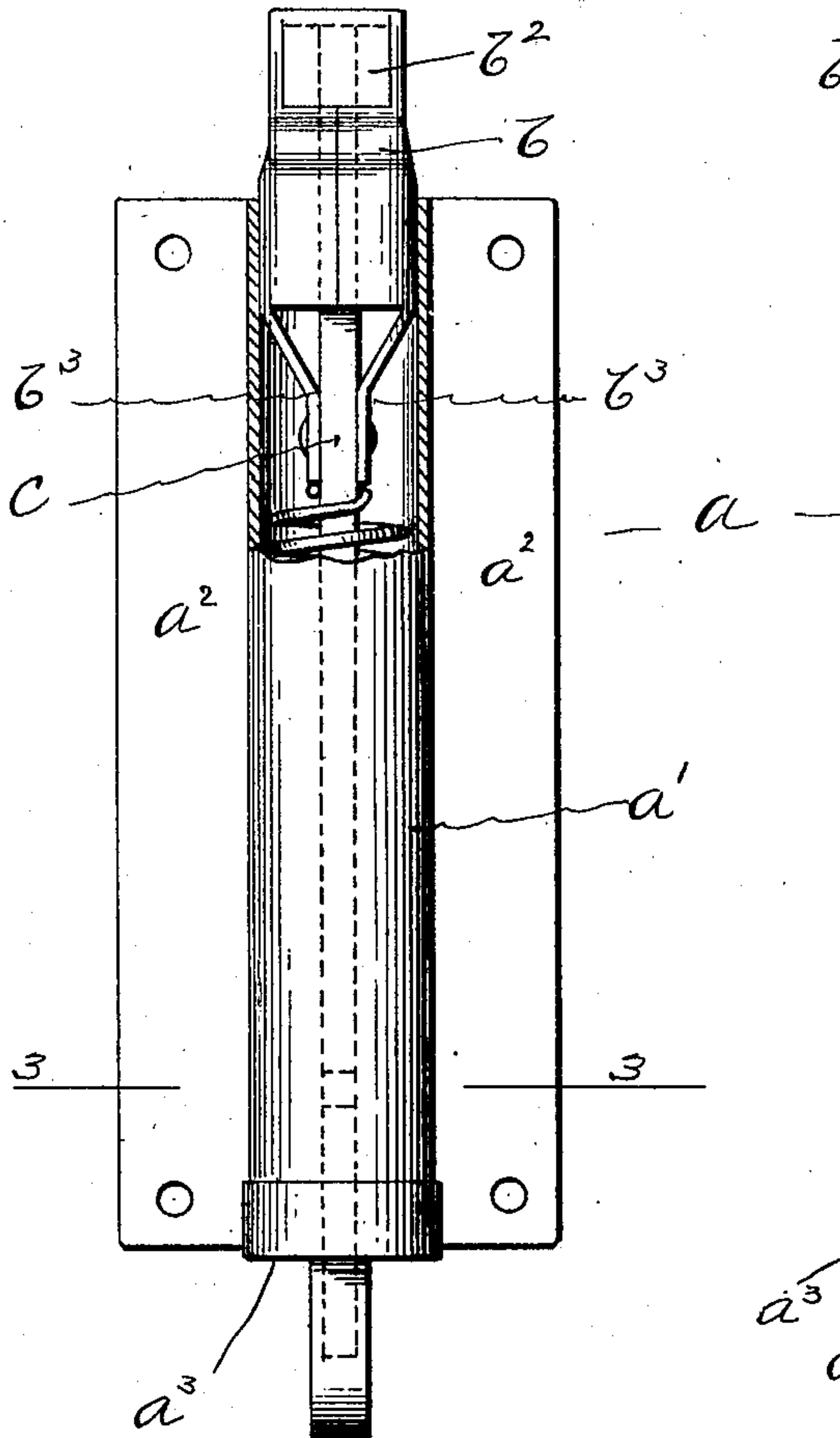


Fig. 2.

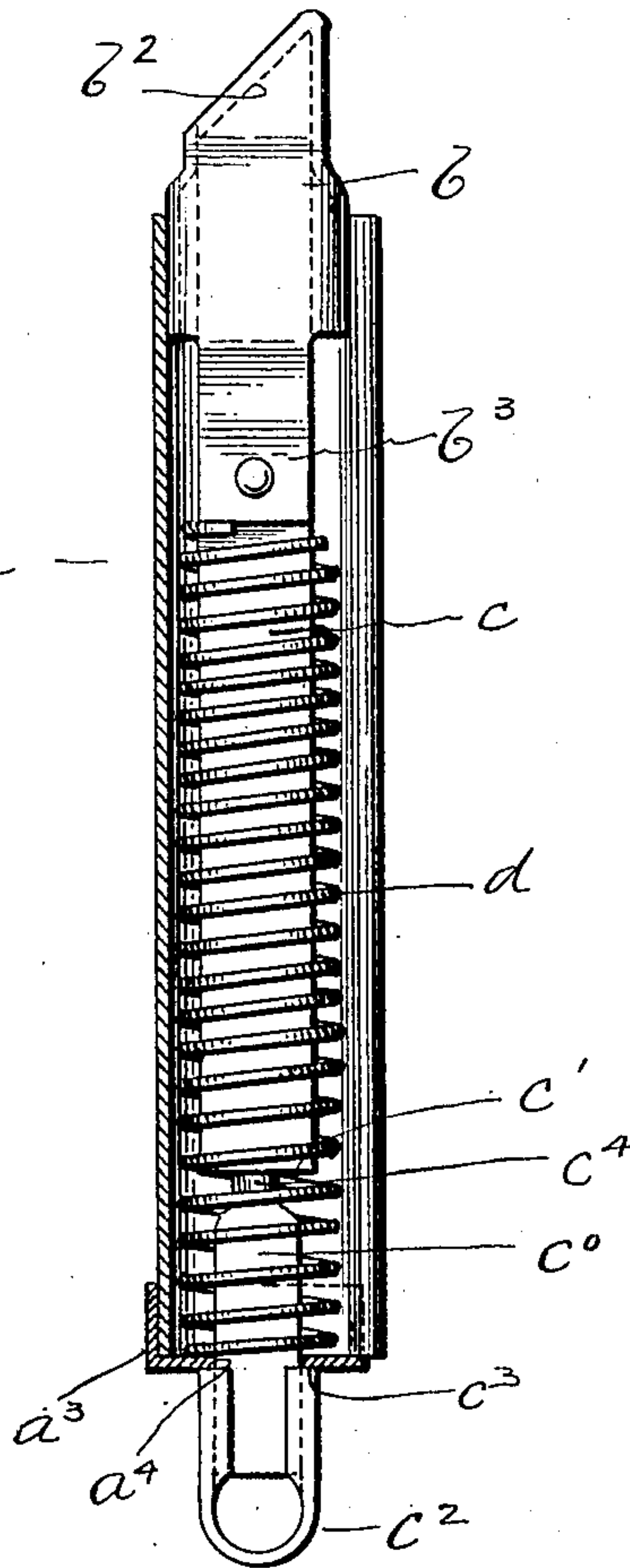
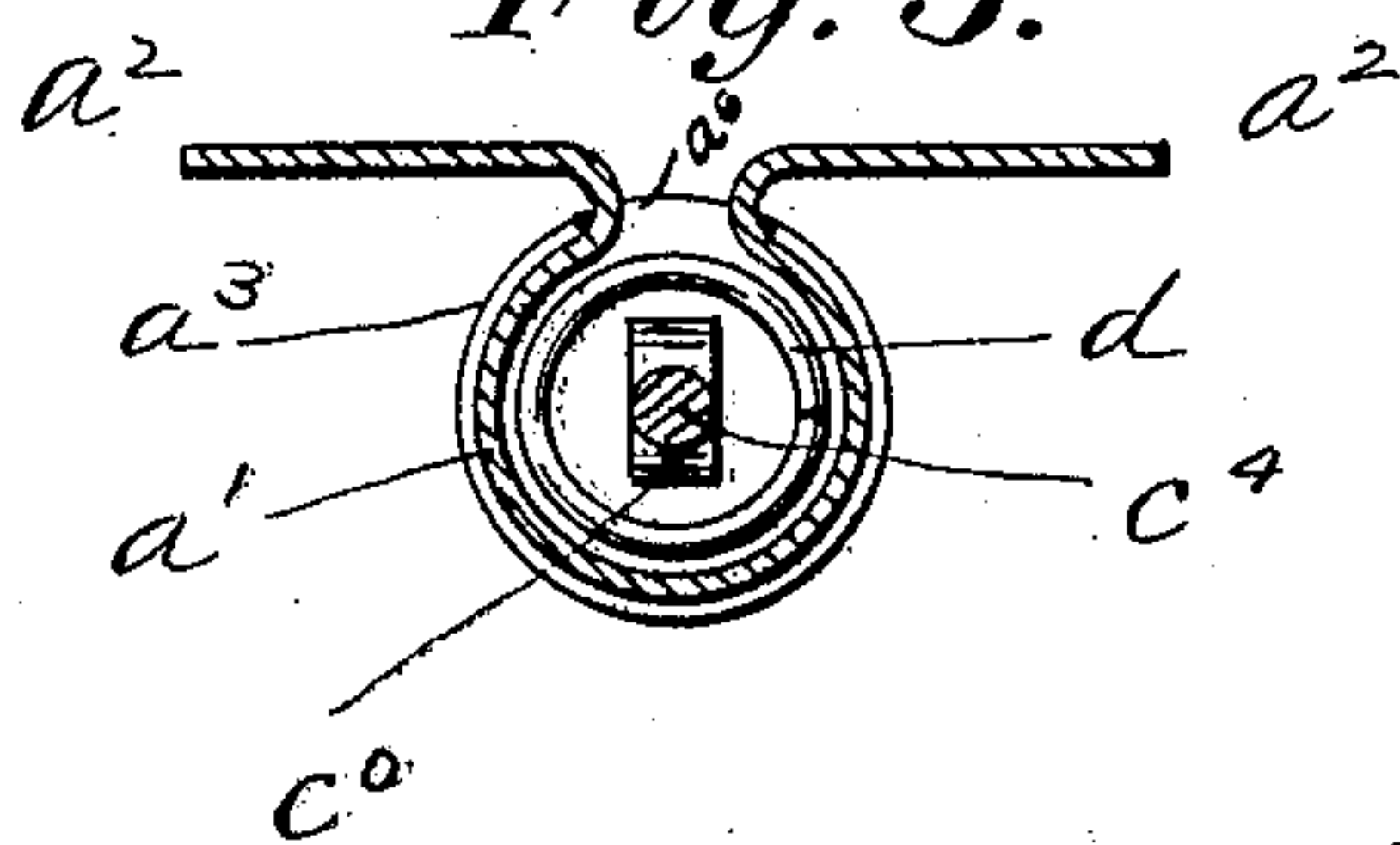


Fig. 3.



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JACOB P. HOLTZHouser, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY WORKS, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

CHAIN-BOLT.

No. 919,581.

Specification of Letters Patent.

Patented April 27, 1909.

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To all whom it may concern:

Be it known that I, JACOB P. HOLTZHouser, a citizen of the United States, and a resident of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Chain-Bolts, of which the following is a specification.

The object of the invention is to produce a device of the character described having features of novelty and advantage.

In the drawings—Figure 1 is a front view of the device with part of the casing broken away. Fig. 2 is a sectional side elevation. Fig. 3 is a section view on the line 3—3 of Fig. 1.

a is the casing, preferably formed out of sheet metal to provide a barrel a' and attaching flanges a^2 a^2 .

a^3 is a cap removably secured to one end of the barrel, but held against rotation thereon, and slotted as at a^4 .

b is the bolt formed up from sheet metal to tubular form with a beveled outer end, a shoe-plate b^2 formed integrally with the bolt being folded over and fitted into the beveled end of the bolt to provide a wearing surface. Arms b^3 b^3 are formed at the upper end of the body of the bolt by means of which it is attached to the stem.

c is the stem having one end projecting into the bolt, shaped to fit and butt against the shoe-plate to support it. The arms are secured to this bolt in any desired manner, as by a rivet. The opposite end of the stem is reduced in size to form a shoulder c' , the reduced end fitting in the slot in the cap.

c^2 is an eye by means of which a chain or like device can be secured to the stem in order to operate the bolt, this eye forming a second shoulder c^3 which with the first shoulder above mentioned limits the lengthwise movement of the stem in the barrel. The reduced portion c^0 of the stem is connected to the main portion by a reduced neck c^4 of a size adapted to turn in the slot a^4 in the cap a^3 .

d is a spring coiled about the stem and located between said cap and a shoulder on the stem or bolt.

In assembling the device the bolt is first secured to the stem, the spring is dropped into place, the cap placed on the stem and the eye secured to the end of the stem.

These parts are then placed in position in the barrel and the cap slid over the end of the barrel, it being cut away as shown at a^0 for this purpose. The reduced end of the stem which slides through the slot in the cap is non-circular in cross section, rectangular, as shown, and acts as a guide to prevent the bolt turning. When it is desired to reverse the bolt the stem is pulled out until the reduced neck comes into the slot, when the bolt can be turned. The shoulder c' prevents too great a withdrawal of the bolt and the shoulder c^3 limits the movement of the bolt in the opposite direction.

The construction is light and strong, the operation simple, and the cost of production low.

I claim as my invention:

1. An article of the character described comprising a barrel, a stem, a bolt secured to one end thereof, the opposite end of said stem non-circular in cross section, a cap slotted to fit said non-circular part, a reduced neck connecting said stem with said non-circular part and rotatable in the slot in said cap, a spring normally forcing said bolt forward, and stops on said stem and on said non-circular part to limit the lengthwise movement of the bolt in the barrel.

2. An article of the character described comprising a barrel, a stem, a bolt secured thereto, a cap slotted to receive said stem and normally holding it against rotation, a spring normally forcing said bolt forward, shoulders on said stem inside and outside of said cap to permit a limited amount of lengthwise movement of the bolt and stem in the barrel, a reduced neck on said stem and near the inner one of said shoulders, said neck being of a size to turn in said slot.

3. An article of the character described comprising a barrel, a stem made up of two parts of different size in cross section, a reduced neck connecting said parts, a bolt secured to the part having the larger cross section, an eye secured to the part having the smaller cross section, and a cap fitting the end of said barrel and slotted to receive part of the stem of smaller cross section and of a size adapted to permit of the turning of said reduced neck therein, and a spring normally forcing said bolt forward.

4. A tubular bolt formed from sheet metal,

a stem secured to said bolt with its end extending into the interior thereof, and a shoe-plate formed integrally with said bolt and folded over against the end of said stem.

- 5 5. A tubular bolt having a beveled end, a shoe-plate formed integrally with said bolt and folded over to close said beveled end, and

a stem extending into said bolt against said shoe-plate, and means for securing said bolt to said stem.

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