

(No Model.)

E. K. EMIG.
HUB ATTACHING DEVICE.

No. 390,465.

Patented Oct. 2, 1888.

Fig. 1.

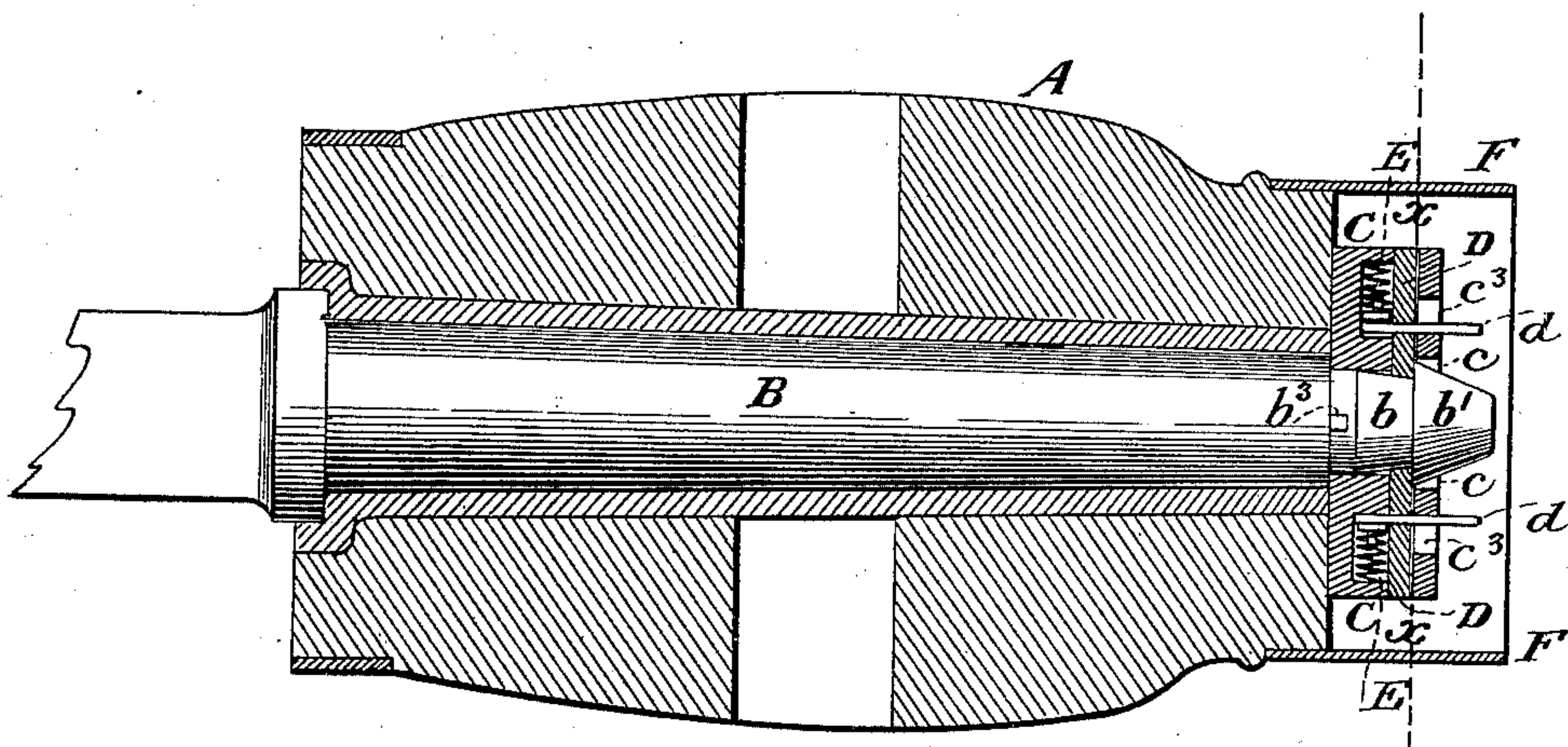


Fig. 2.

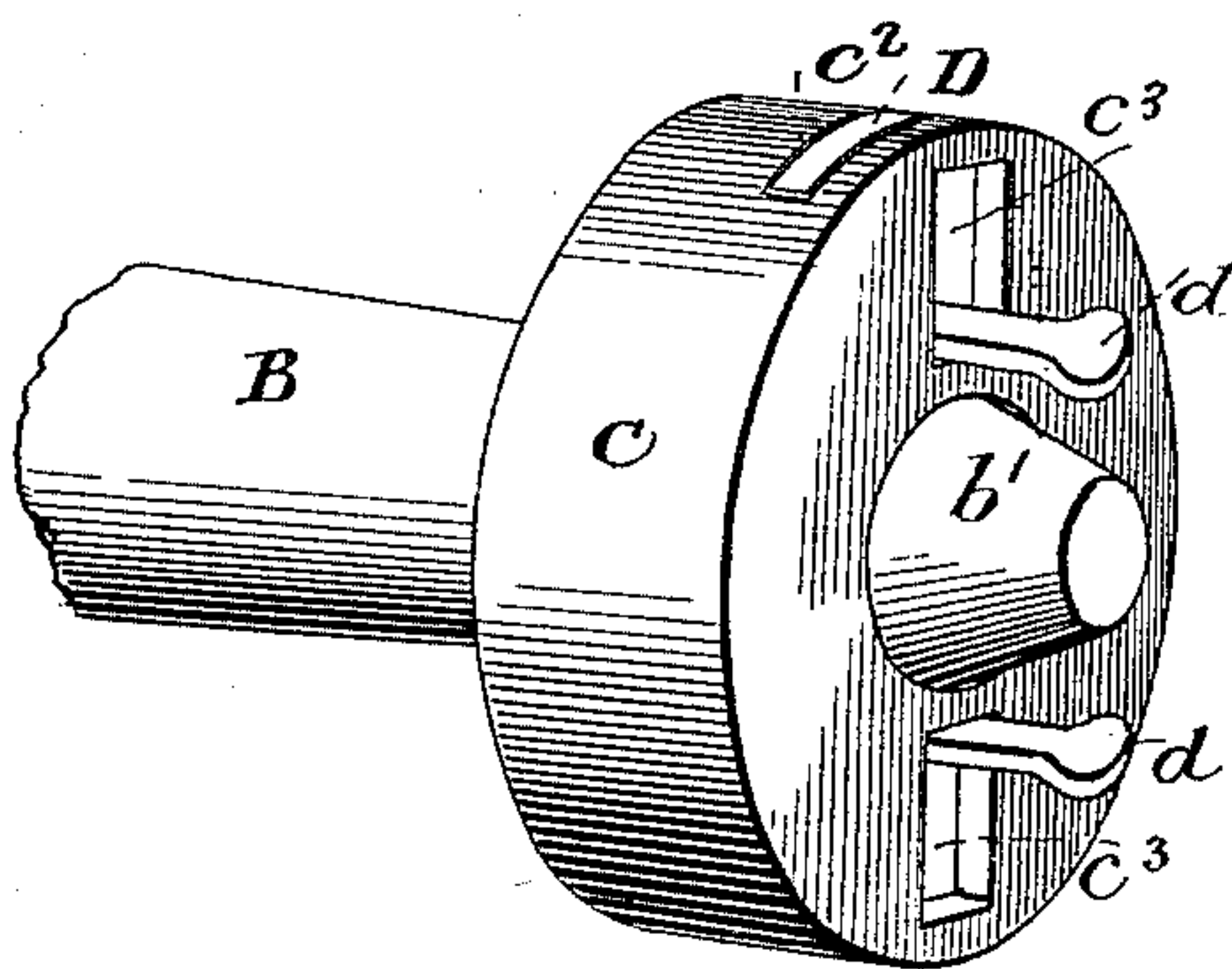


Fig. 3.

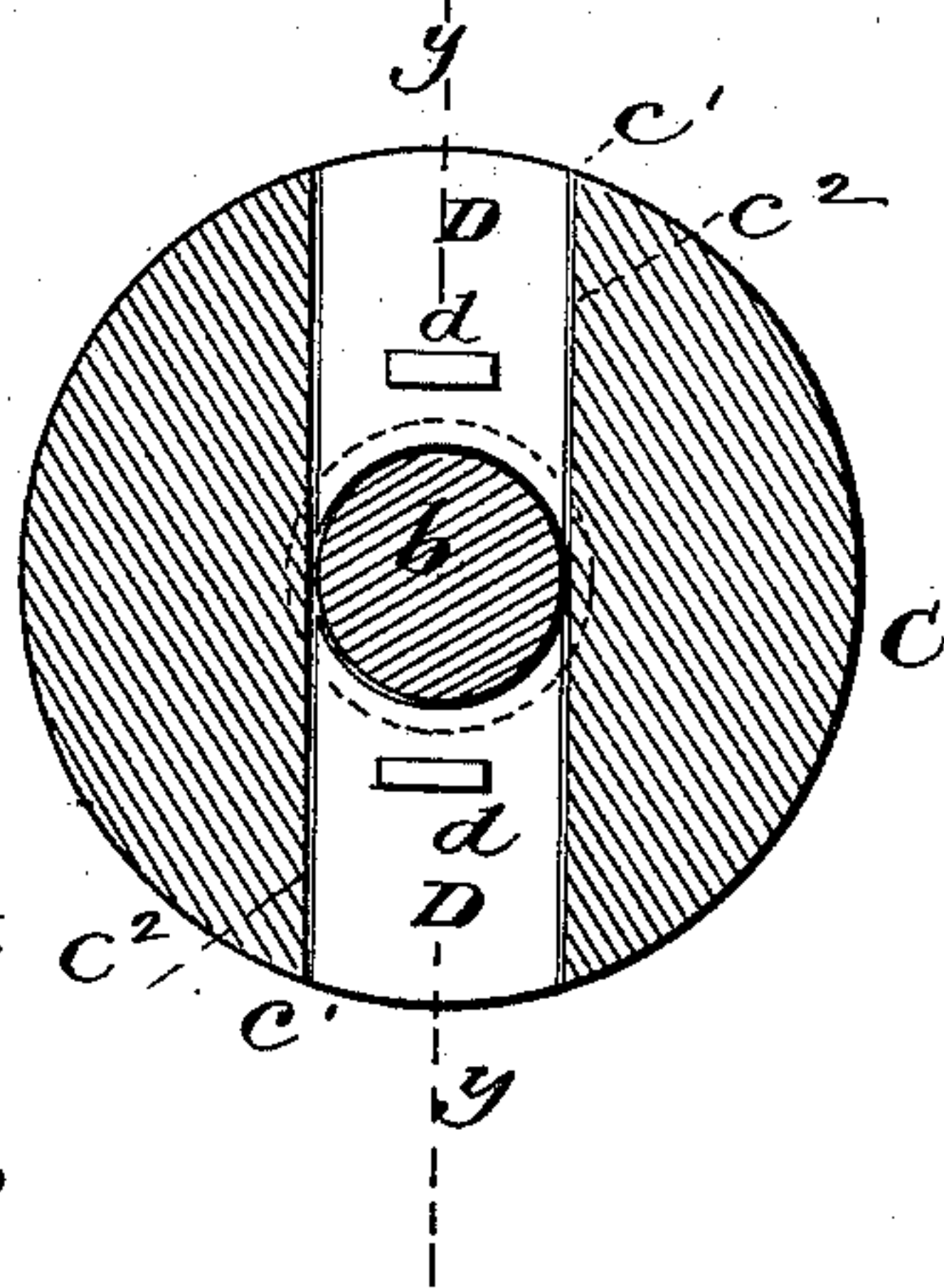
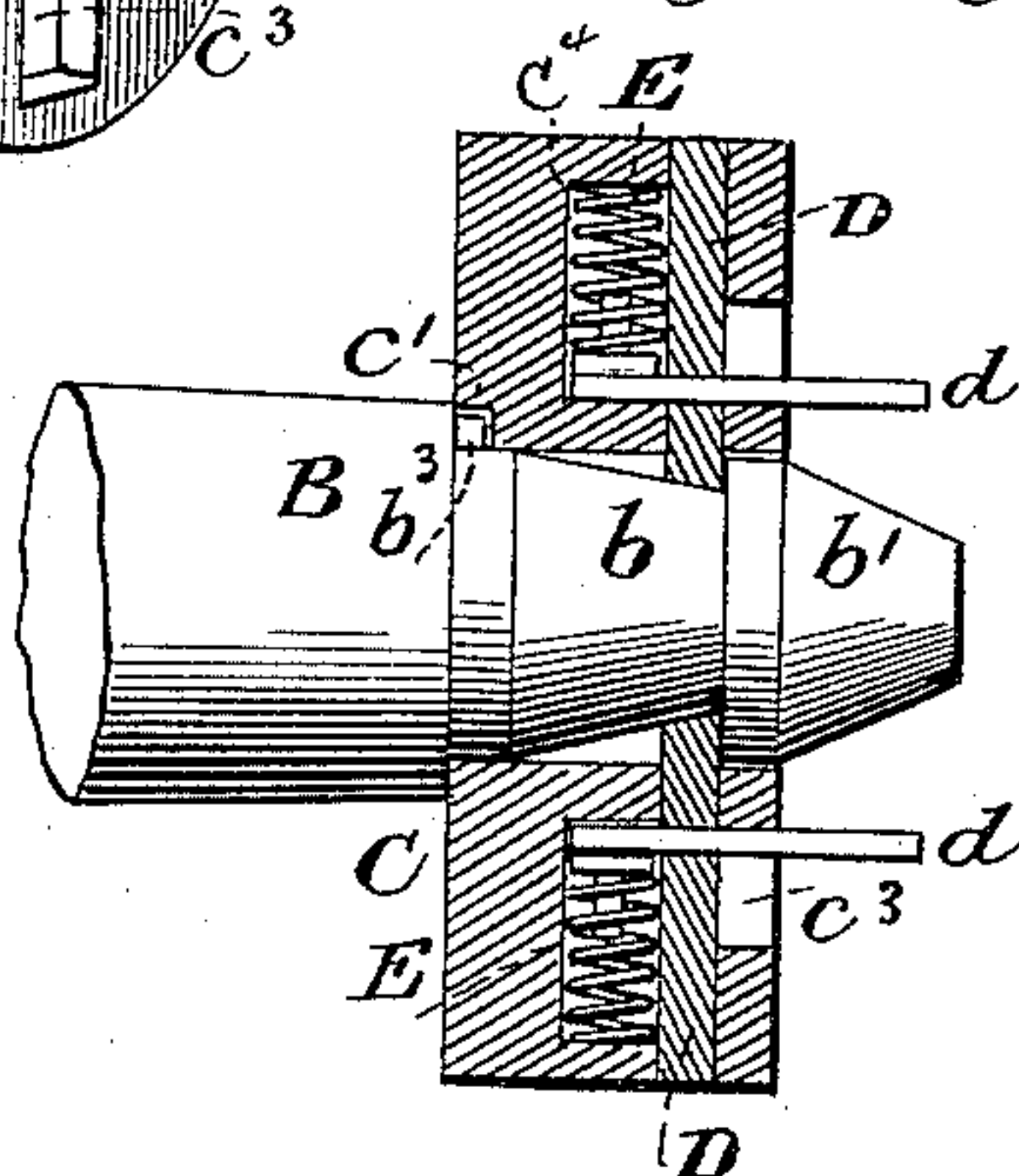


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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HUB-ATTACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 390,465, dated October 2, 1888.

Application filed February 6, 1888. Serial No. 263,176. (No model.)

To all whom it may concern:

Be it known that I, EDWARD K. EMIG, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Connecting the Hub and Axle of a Vehicle; and I do declare the following to be a full, clear, and exact description of the invention, such 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 the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to make such improvements in the device described in Patent No. 277,425, for attaching hubs to their axles, as will greatly lessen their cost, as well as the larger part of the time and labor required in using the attachment.

Figure 1 of the drawings is a vertical longitudinal section showing my invention applied; Fig. 2, a perspective view of the attachment itself; Fig. 3, a section on the dotted line $x x$ of Fig. 1, and Fig. 4 a section on the dotted line $y y$ of Fig. 3.

In the drawings, A represents a hub, and B an axle, fastened together by my attachment. The metallic ring C is provided with the central pole, c , the notch c' in the periphery thereof, the radial grooves $c^2 c^2$, and the opposite slots, $c^3 c^3$.

D D are axle-clamps which slide in the grooves c^2 , and are held to the neck b of the axle, behind the head b' , by the spiral springs E E. The latter are arranged in the slots c^3 , and act upon the pins d , which extend through and project upon both sides of the clamps D. Thus it will be seen that the springs E, which hold the clamps to the axle-neck b , may be overcome by pressing the pins d divergently with the fingers, and the ring, hub, and axle separated in a moment.

F is the usual hub-band, which is circumferentially larger than ring C, so as to allow room for the retraction of the clamps to release the axle.

The axle B is made with the stop b^3 to work in the notch c' of the ring C, so that the latter will not be able to turn on the axle and with the wheel.

The spring-clamps are shown in the Patent No. 277,425; but are made hollow and therefore too expensive. The ring is screwed to the hub, so as to move therewith, while mine is fast to the axle, so as not to move at all; also, the ring described in said patent requires a special tool to operate it, while mine is worked with the fingers. By my improvements I save more than one-half the cost, the time in manipulation, and the labor.

By pressing the pins $d d$ apart the clamps D are raised and the ring C unlocked, while in putting the device on the axle the clamps D are raised against the springs E by the conical axle-head b' .

What I claim as new, and desire to protect by Letters Patent, is—

In devices for connecting the hub and axle of a vehicle, the combination of a grooved ring, C, having the slots c^2 and notch c^3 , the clamps D D, made solid and with a pin, d , projecting on both sides, the springs E, and an axle having the conical neck b , head b' , and stop b^3 , working in the notch c' of the ring, whereby the ring C may be unlocked with the fingers, so as to dispense with a special tool, and may be detachably fastened to the axle, so as not to turn with the wheel, all substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD K. EMIG.

Witnesses:

A. RUPPERT,
THOMAS P. SIMPSON.