

W. E. PRATT.

Device for Attaching Hubs to Axles.

No. 165,504.

Patented July 13, 1875.

Fig. 1.

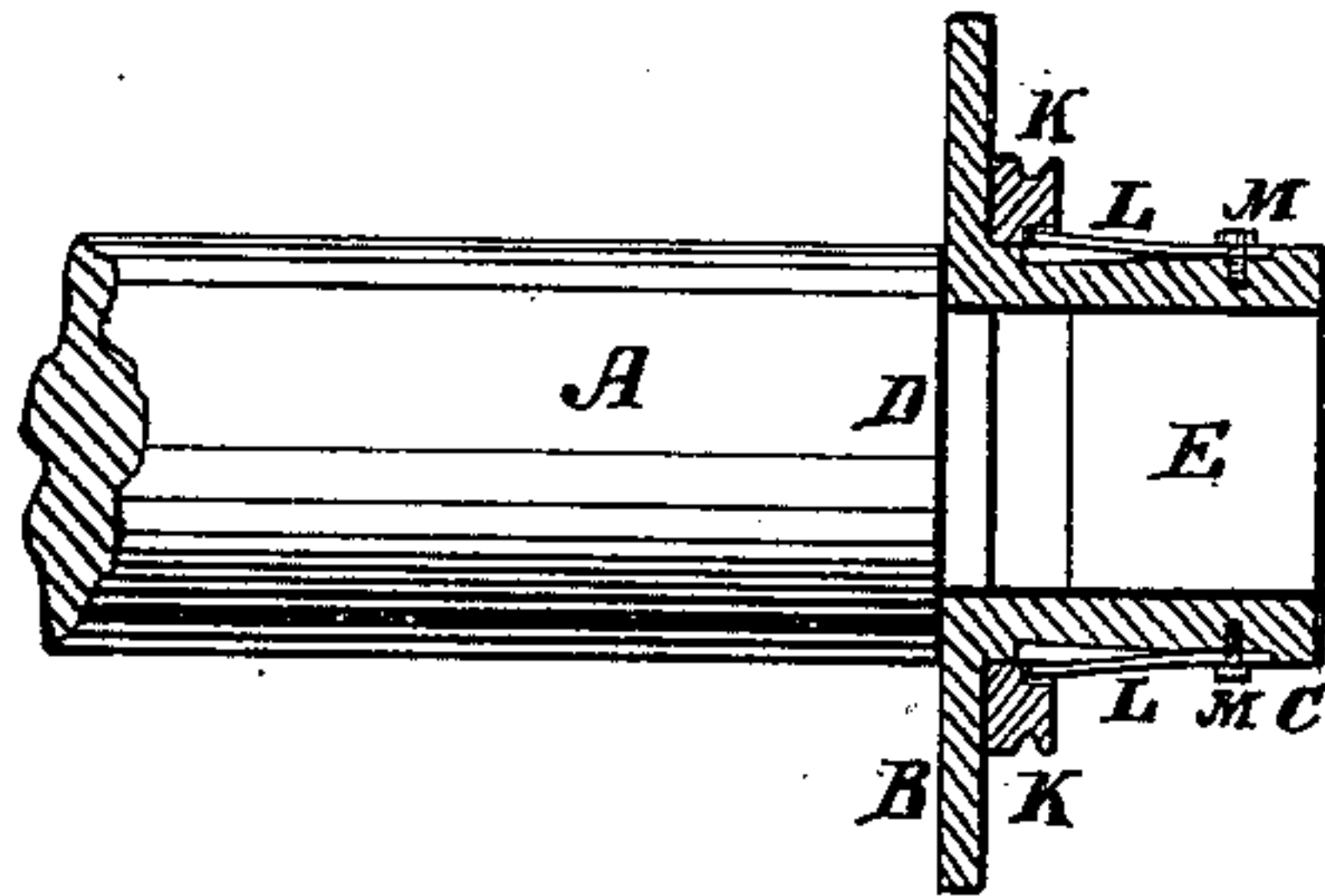


Fig. 2.

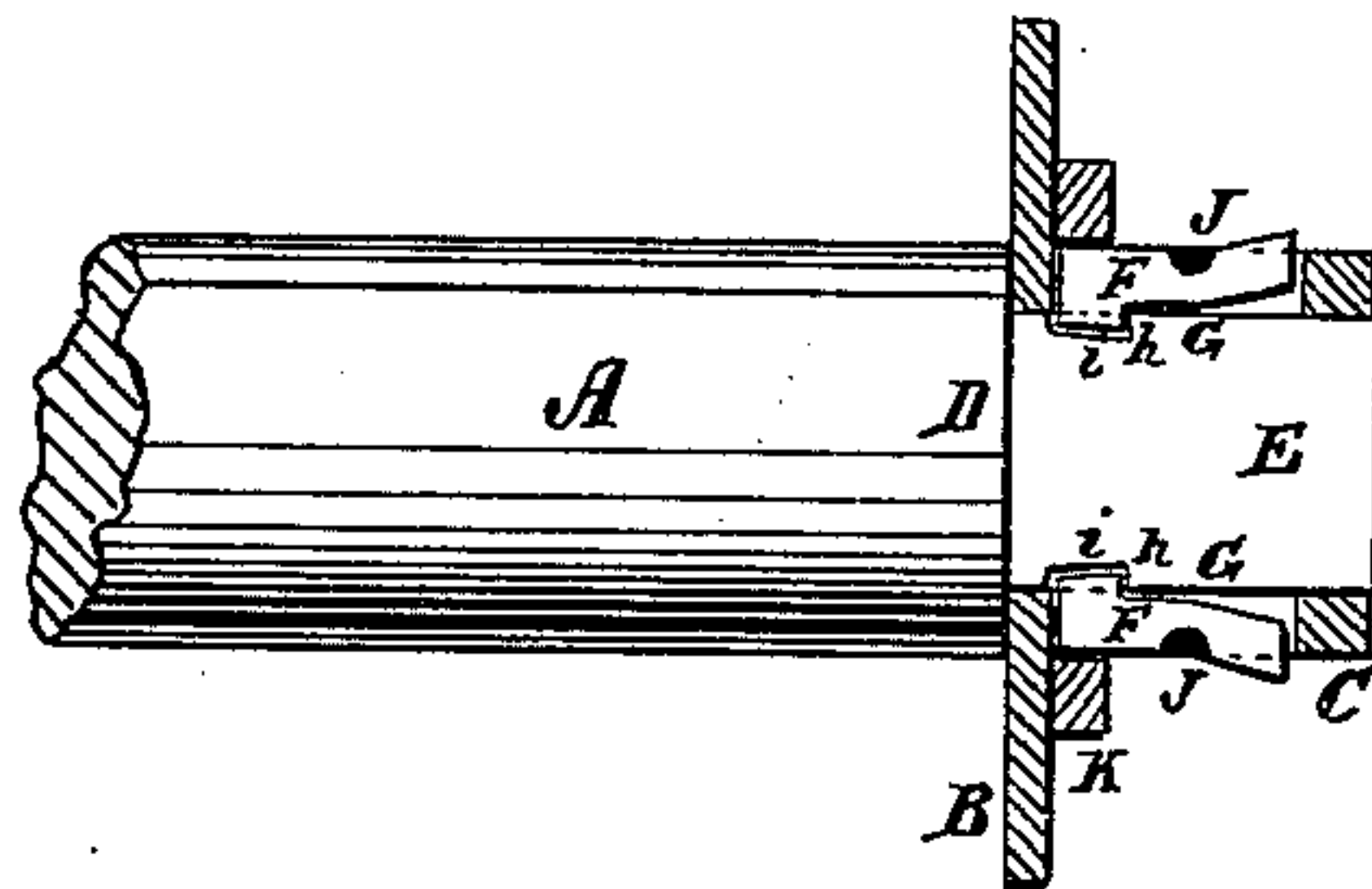


Fig. 3.

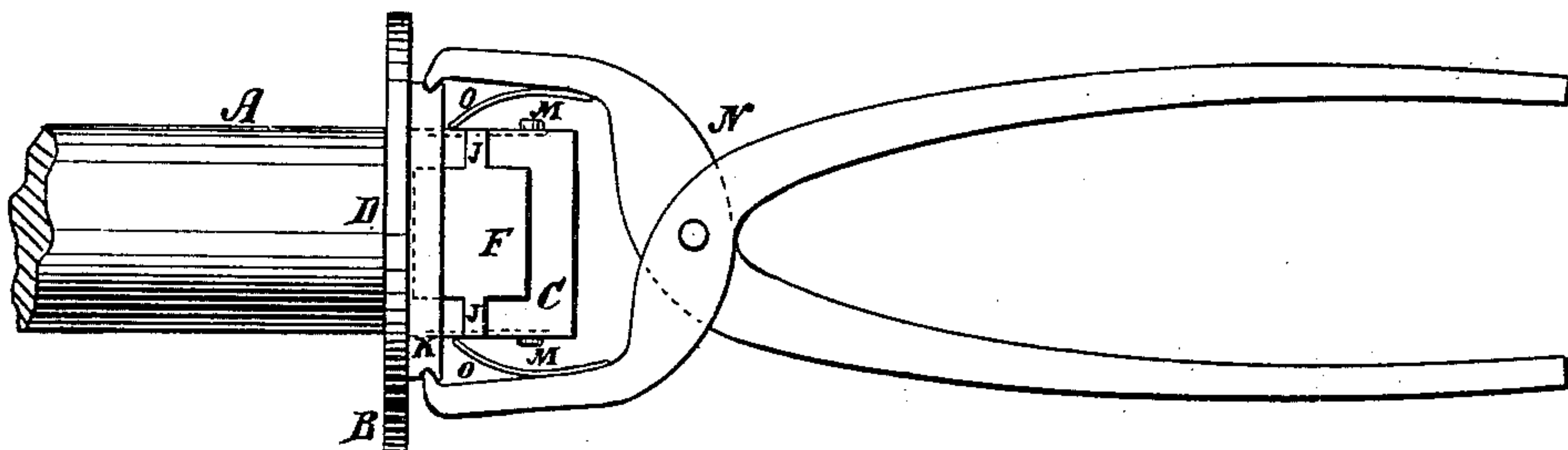
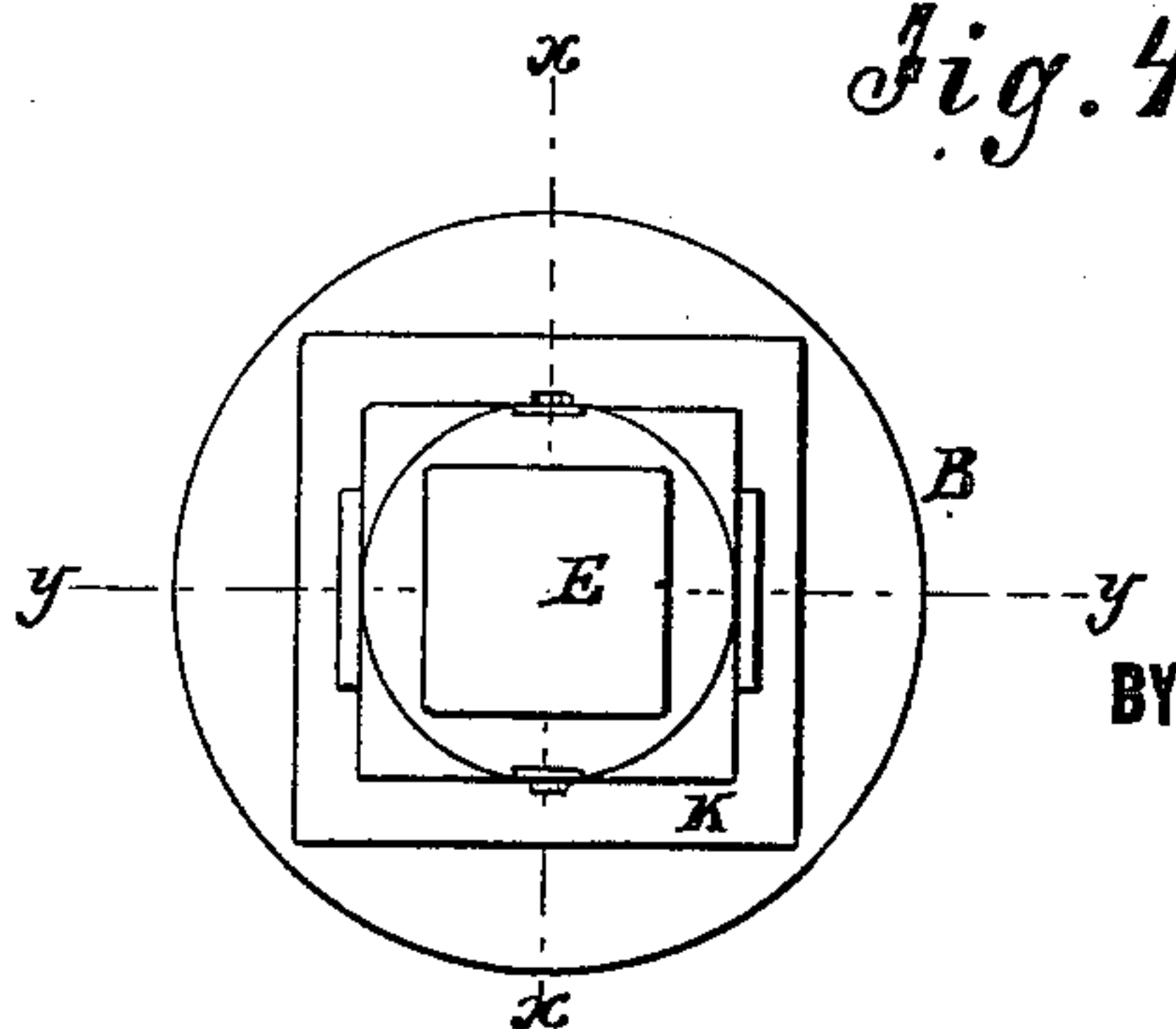


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WARREN E. PRATT, OF CHESANING, MICHIGAN.

IMPROVEMENT IN DEVICES FOR ATTACHING HUBS TO AXLES.

Specification forming part of Letters Patent No. **165,504**, dated July 13, 1875; application filed January 4, 1875.

To all whom it may concern :

Be it known that I, WARREN E. PRATT, of Chesaning, in the county of Saginaw and State of Michigan, have invented a new and useful Improvement in Axle-Fastenings, of which the following is a specification :

The object of this invention is to provide convenient means for fastening the wheels of a vehicle on the axle without the use of screw-threads or the ordinary "burr" or screw nut ; and it consists in leaving the ends of the axle or skein square or polygonal, and fastening on the end thereof a washer, to which is attached a key-box, having an orifice to fit the axle, the same being fastened to the axle by means of keys and springs, as hereinafter described.

In the accompanying drawing, Figure 1 is a section of the fastening, taken on the line *xx* of Fig. 4. Fig. 2 is a section taken on the line *yy* of Fig. 4. Fig. 3 is a side view, showing the implement by means of which the fastening is taken off or put on. Fig. 4 is an end view of the fastening.

Similar letters of reference indicate corresponding parts.

A represents the axle or skein. B is the washer, to which is attached the key-box C. This washer and box slips on the end of the axle up to the shoulder D, over the square end E of the axle. This end E may have four or more sides. F F are keys, which are placed loosely into the recesses G G in the sides of the key-box C. These keys have each a shoulder, *h*, which fits into small recesses, *i*, cut in the axle. J J are arms on the keys,

which fit into grooves in the box, which arms serve to hold the keys in position. K is a band, which slips over the box and rests against the washer. This band is held in place by springs L L, (see Fig. 1,) the springs being fastened in recesses to the box by the small screws *m m*. N represents the instrument for putting on and taking off the fastening. This article is in the form of a nippers, having two jaws, which engage with a groove cut in the edges of the band K. O O are springs on the jaws, which press upon the springs L L and crowd them inward, so as to disengage them from the band K—the springs being curved, so that the ends spring outward when the screws *m m* are turned up. When the nippers are applied to the band, as seen in Fig. 3, the springs O O force the springs L L back, which allows the band to be removed and the fastening to be taken from the axle. This fastening is readily applied. It is strong and durable and a great improvement over the ordinary burr or screw nut.

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

The combination, with an axle having a square or angular end portion, E, and recesses *i* therein, of the key-box C, washer B, shouldered keys F, the band K, and the springs L, substantially as and for the purpose set forth.

WARREN E. PRATT.

Witnesses :

CYRUS FAUBLE,
JOHN CLEMENT.