

(No Model.)

P. L. KOSCIALOWSKI.
CARRIAGE AND WAGON JACK.

No. 318,992.

Patented June 2, 1885.

Fig. 1.

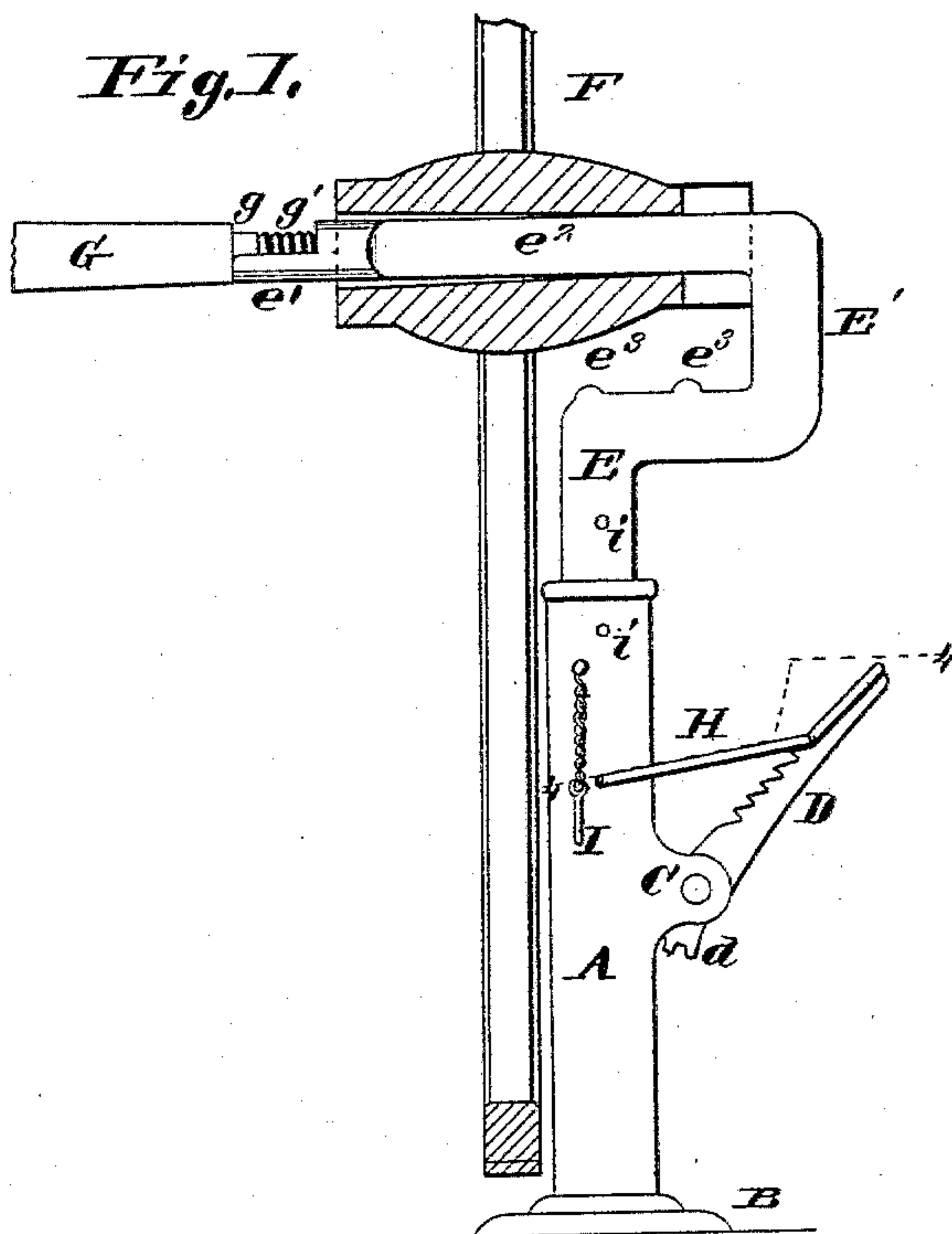


Fig. 2.

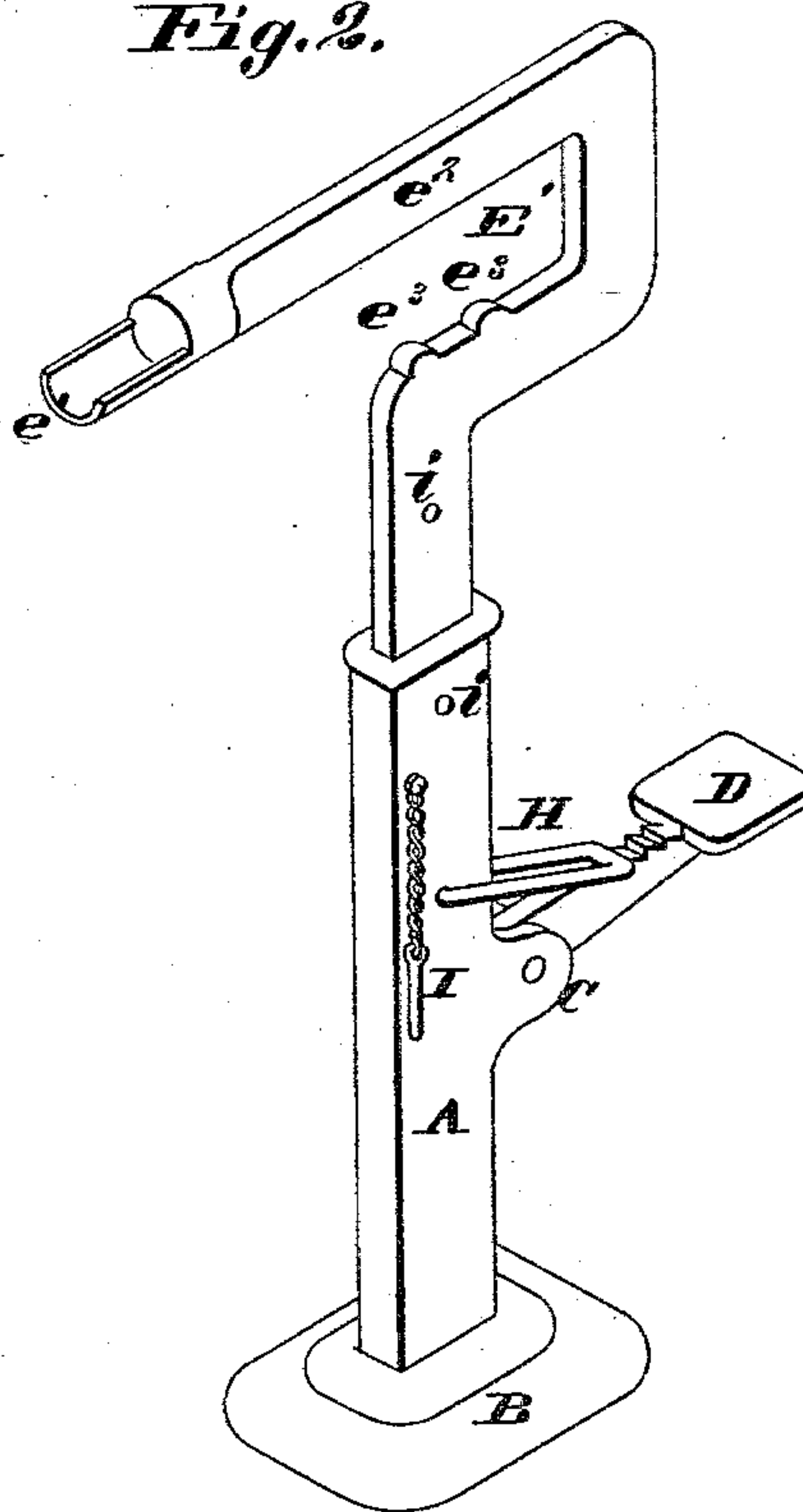


Fig. 3.

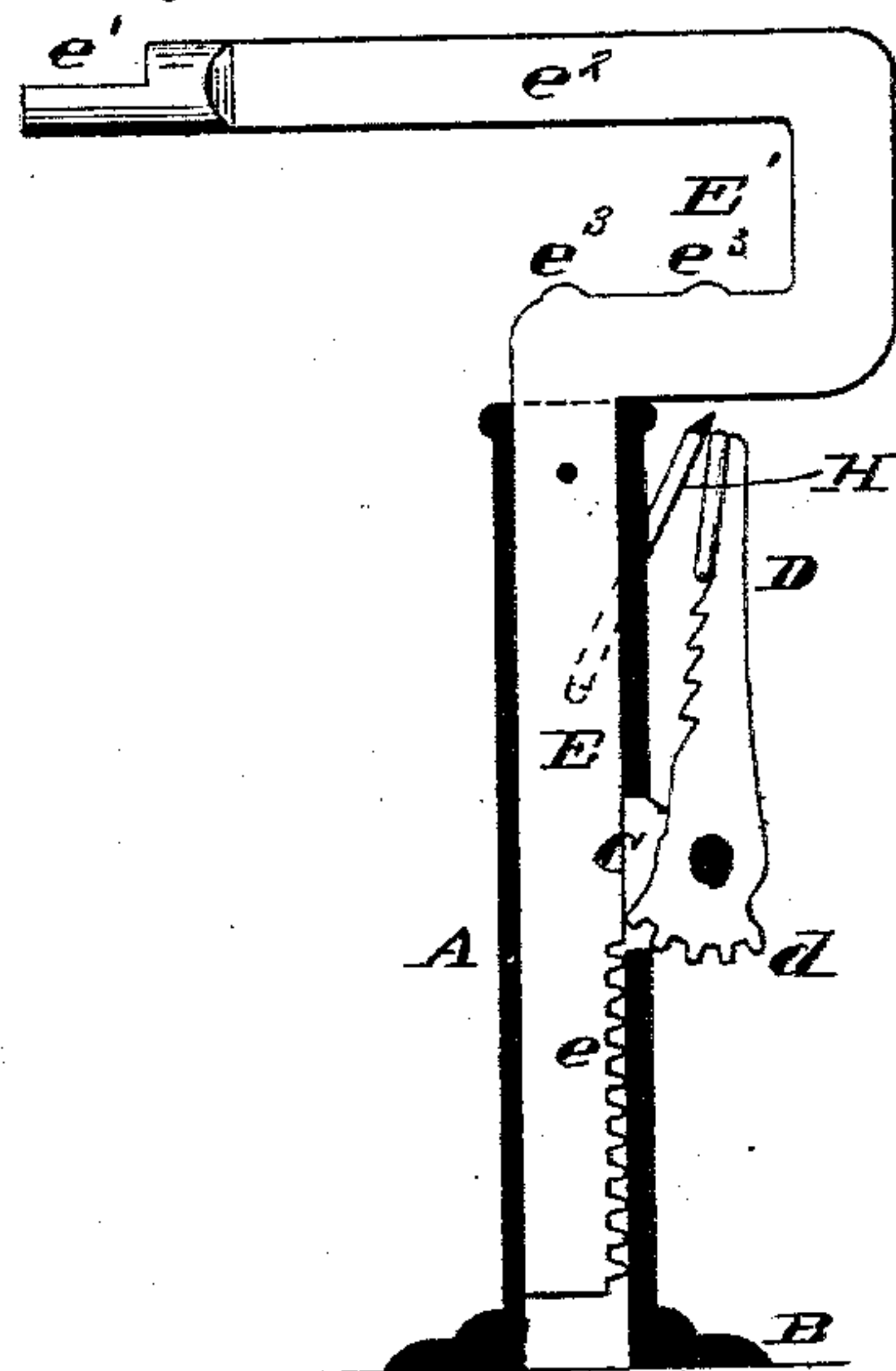
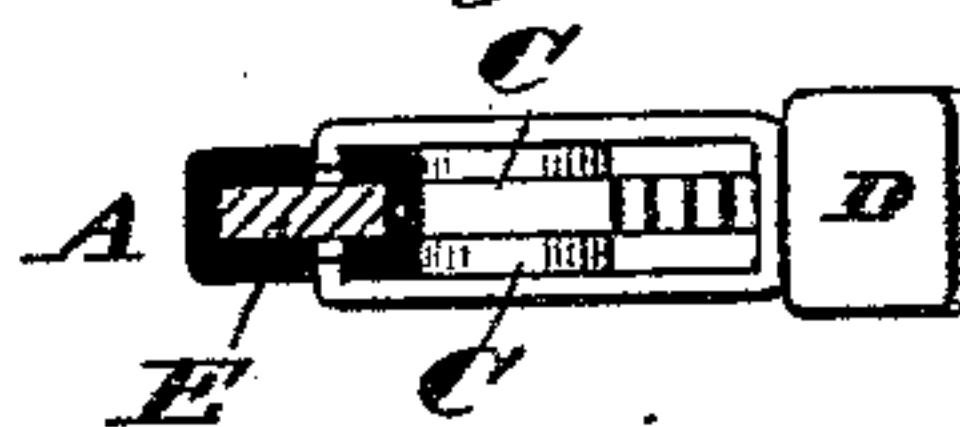


Fig. 4.



Inventor:

Philip L. Koscialowski

By Knight Bro.

Atty's.

Attest:

L. M. Kaptain

Geo. S. Wheelock.

UNITED STATES PATENT OFFICE.

PHILIP L. KOSCIALOWSKI, OF ST. LOUIS, MISSOURI.

CARRIAGE AND WAGON JACK.

SPECIFICATION forming part of Letters Patent No. 318,992, dated June 2, 1885.

Application filed March 30, 1885. (No model.)

To all whom it may concern:

Be it known that I, PHILIP L. KOSCIALOWSKI, of the city of St. Louis and State of Missouri, have invented a certain new and useful
5 Improvement in Carriage and Wagon Jacks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 Figure 1 is a side view of the jack with a wheel-hub shown in section. Fig. 2 is a perspective view of the jack. Fig. 3 is a vertical section with the lifting-bar in its lower position. Fig. 4 is a horizontal section at 4 4,
15 Fig. 1.

A is a hollow stand having a base, B, and lugs C, to which the treadle-lever D is fulcrumed. The treadle has a cog-sector, *d*, at the end, which engages a cog-rack, *e*, upon
20 the edge of the lifting-bar E. The lifting-bar works in the stand A. The head E' has preferably a return-bend, as shown, so that the nose *e'* shall not project far beyond the base, and the weight of the wheel F, when drawn
25 off the spindle G, may be over the base. The nose has a rounded or curved form, as shown in Fig. 2, so that it fits the shank *g* of the spindle-screw *g'*, and thus the end of the axle is sustained upon the nose while the hub of the
30 wheel is drawn out on the horn or bow *e*². (See Fig. 1.) The lifting-bar E is sustained when in its elevated position by the treadle-lever, the sector *d* engaging with rack *e*, the treadle itself being held in the position shown
35 in Figs. 2 and 3 by a hinged dog or pawl, H, which engages teeth *d'* upon the treadle.

I is a pin, which may be inserted in the holes *i* of the stand and bar to hold the bar in the position shown in Fig. 3. When the pin
40 I is inserted in holes *i*, the head E' may be used as a handle to carry the jack.

The operation is as follows: The nut is removed from the spindle-screw *g'* and the wash-

er from the shank *g* (if there is a washer used) while the wheel is upon the ground. The jack 45 is then placed in position outside the wheel and the nose *e'* inserted beneath the screw and shank. It will be seen that when the treadle is in the position shown in Fig. 3 the lifting-bar may be moved freely in the stand. When 50 the nose has been inserted beneath the screw-shank, the outer end of the treadle is depressed, and the wheel thus lifted from the ground. The wheel is then pulled outward until the hub leaves the spindle, and is carried upon the 55 horn *e*². The bar E may be sustained by the pressure of the foot or by means of the dog H.

When it is desired to remove the wheel away from the vehicle, the jack may be used in the manner of an ordinary jack, being put beneath 60 the axle inside the wheel. For this use of the jack I cast upon the head knobs *e*³ *e*³, to prevent the axle slipping on the head.

I claim—

1. A jack comprising a stand having an arm 65 or horn adapted to sustain the end of the axle on the stand and to receive the wheel as it is removed from the spindle.

2. The combination, in the lifting-bar of a jack, of a curved nose adapted to engage the 70 spindle end before the removal of the wheel from the spindle, and a horn, of which the nose forms the extremity, adapted to enter the bore of the hub and support the wheel.

3. The combination of lifting-bar having a 75 horn, *e*², with nose *e'* and cog-rack *e*, and a treadle-lever, D, with cog-sector *d*, engaging the rack *e*, substantially as set forth.

4. The combination, in the lifting-bar E, of the head having a return-bend with horn *e*² 80 and nose *e'*, substantially as and for the purpose set forth.

PHILIP L. KOSCIALOWSKI.

Witnesses:

SAML. KNIGHT,

GEO. H. KNIGHT.