

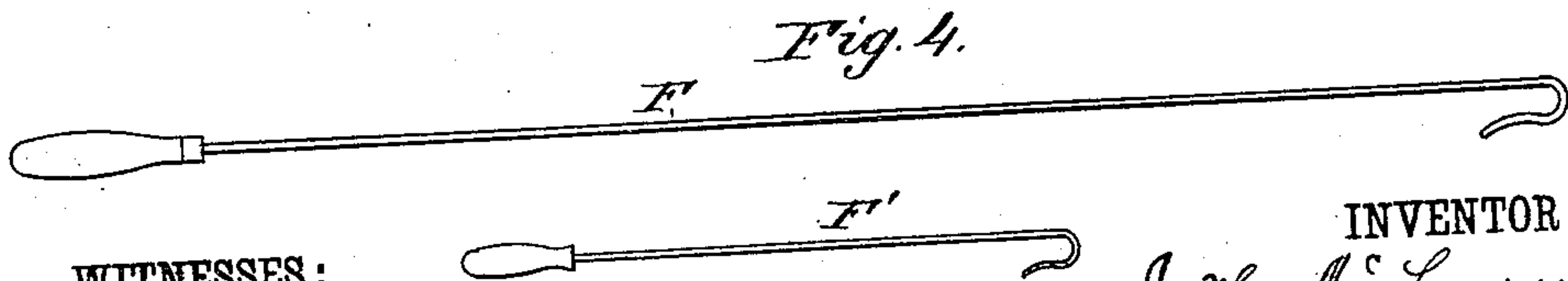
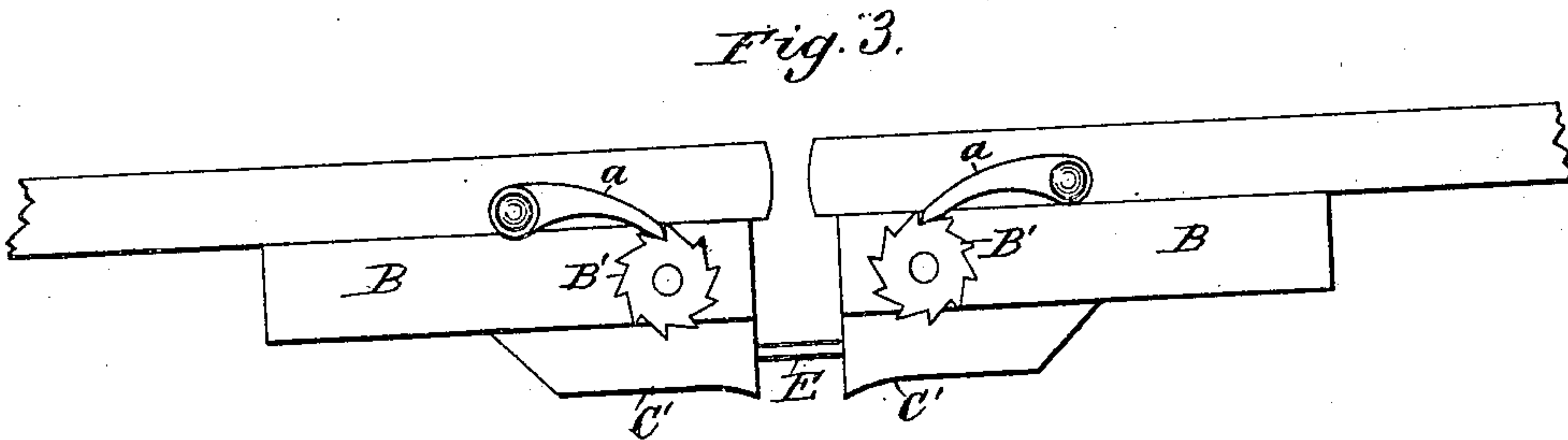
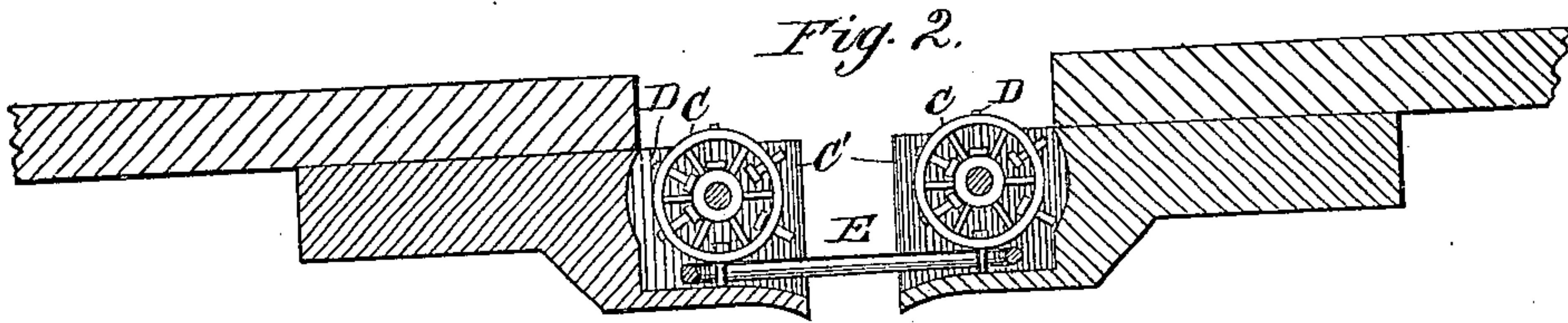
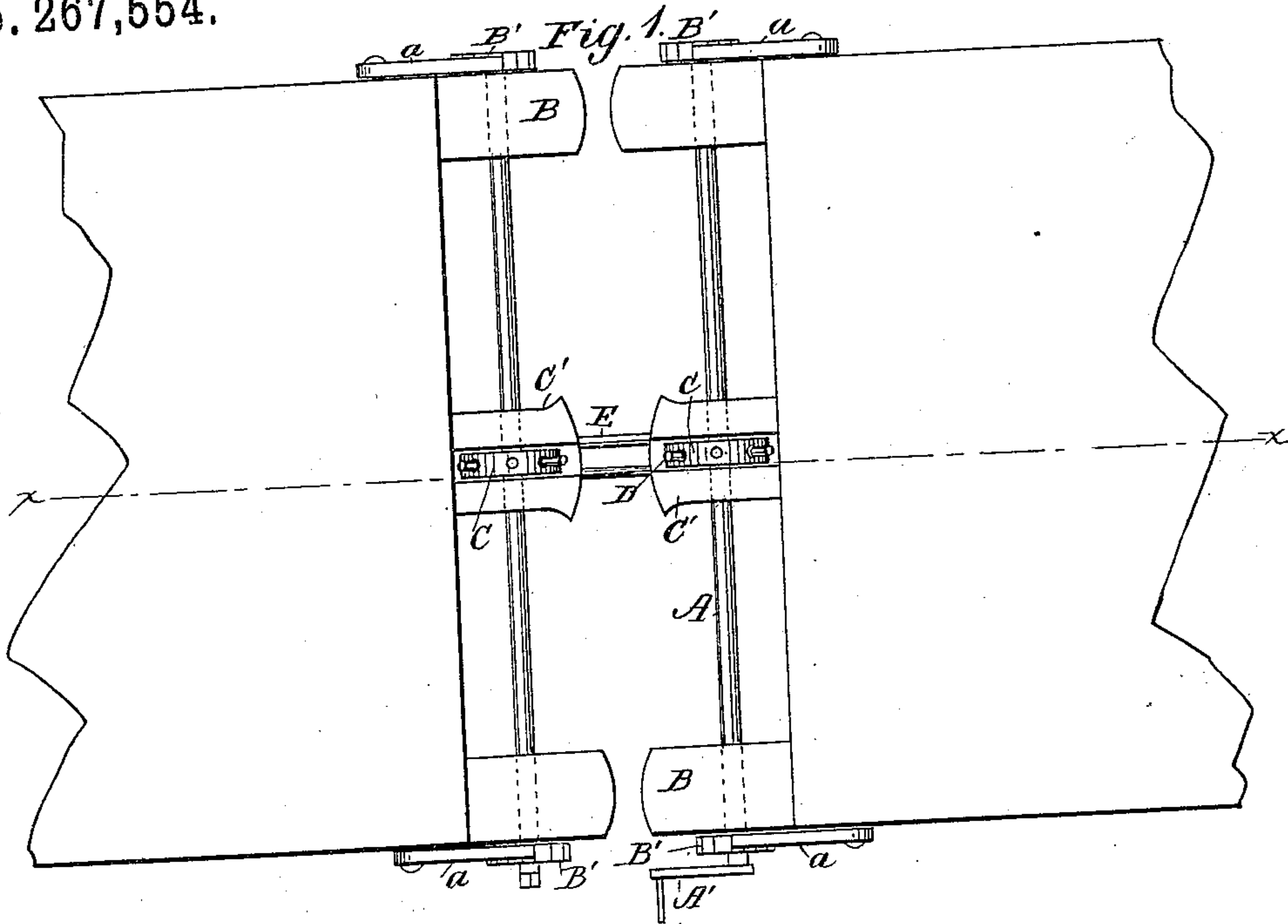
(No Model.)

J. H. McLEARY.

CAR COUPLING.

Patented Nov. 14, 1882.

No. 267,554.



WITNESSES:

*W. W. Hollingsworth*  
*John C. Remon*

INVENTOR:

*J. H. McLeary*  
BY *Wm. L. L.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JAMES H. MCLEARY, OF SAN ANTONIO, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 267,554, dated November 14, 1882.

Application filed October 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES HARVEY MCLEARY, of San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has relation to improvements in car-couplings, and is automatic in its coupling operation and readily uncoupled at the side of the cars or upon the same, whereby the operator is not required to go between the cars to couple or uncouple them; and it consists in the employment of a handled shaft hung in suitable bearings or buffers at the end of the car, and having a wheel provided with a series of pins or arms adapted to be automatically projected and retracted, said shaft also having ratchets engaged by holding-pawls, substantially as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan view of my improved coupling applied in duplicate form to the ends of two cars, shown partly broken away. Fig. 2 is a longitudinal section thereof, and Fig. 3 is a side view of the same. Fig. 4 is views of two different sized or lengthened hooks for disengaging the pawls from the ratchets of the coupling-shaft.

In carrying out my invention I employ a shaft, A, supported in bearings or buffers B, fastened to the end of the car, at its corners or sides, said shaft having a handle, A', and ratchets B' at its ends, engaged by gravity-pawls, a, hung upon the sides of the car.

C is a wheel fixed upon the shaft A about at its center, and disposed in the draw-head C', through which the shaft A passes, said wheel being provided between its spokes with arms or pins D, adapted to be automatically projected and retracted, they being passed through apertures in the periphery of the wheel, which allow them to freely slide therein, and having headed inner ends which prevent them falling out of the wheel when projected, and cause the automatic withdrawal or retraction of the ascending pins or arms during the movement or turning of the wheel. The wheel C is so disposed in the draw-head as that the projected

pins or arms thereof will almost touch the bottom of the draw-head, the purpose of which is to prevent the escape of the link therefrom when in its coupled position.

E is the coupling-link, which is preferably flattened at its ends, and caused to enter the draw-head beneath the wheel C to receive the coincident pin or arm D of the latter.

F F' are two hooks to aid the ready uncoupling of the cars, the longer one being designed to enable the operator standing on the top of a house-car to disengage the pawls from the ratchets on the wheel-shaft A, while the shorter one is intended to enable the operator, when standing on a platform-car, to release the pawls from their ratchets, when, by the movement apart of the cars, the link will, by drawing upon the retaining-pin of the wheel C, cause the uncoupling of the cars. The disengagement of the pawls from the ratchets is performed when the operator may be standing on the ground, and without requiring his going between the cars, by the hand, by first turning the handle A' of the shaft A to remove pressure from the pawl, and lifting the pawl off the ratchet, when the uncoupling operation is completed, as above stated.

The coupling operation is effected automatically, since when one end of the coupling-link E (its other end having been adjusted in a coupled position with one of the wheels and its draw-head) is caused to enter the draw-head of the meeting car it will strike or act against the coincident projecting pin or arm of its wheel, and by such action cause the turning of the said wheel, which will cause a following or succeeding pin or arm to be projected and enter the link, and thus cause the automatic coupling of the cars.

It will be further noticed that in addition to the foregoing the coupling and uncoupling operations are both performed automatically, the adjustment of the link and ratchet-pawl not being taken into account; that play is obtained both in a lateral and a vertical direction to accommodate the movement of the cars in rounding curves and unevenness in the road and cars of different heights; that this coupling can be applied to cars using the ordinary form of link, and that it is simple in construction and inexpensive to manufacture.



Having thus described my invention, what I claim as new is—

5 1. In a car-coupling, the combination, with the draw-head and coupling-link, of the shaft having the wheel provided with the automatically projecting and retracting pins or arms, substantially as and for the purpose set forth.

10 2. In a car-coupling, the combination, with the draw-head and coupling-link, of the shaft having a ratchet engaged by a holding-pawl, and the wheel provided with the automatically projecting and retracting pins or arms, substantially as and for the purpose set forth.

3. In a car-coupling, the combination, with the draw-head C' and coupling-link E, of the 15 shaft A, having the handle A', the ratchets B', engaged by holding-pawls *a*, and the wheel C, carrying the automatically projecting and retracting pins D, substantially as and for the purpose specified.

JAMES HARVEY McLEARY.

Witnesses:

V. O. KING,  
CARRIE GILLMORE.