

(No Model.)

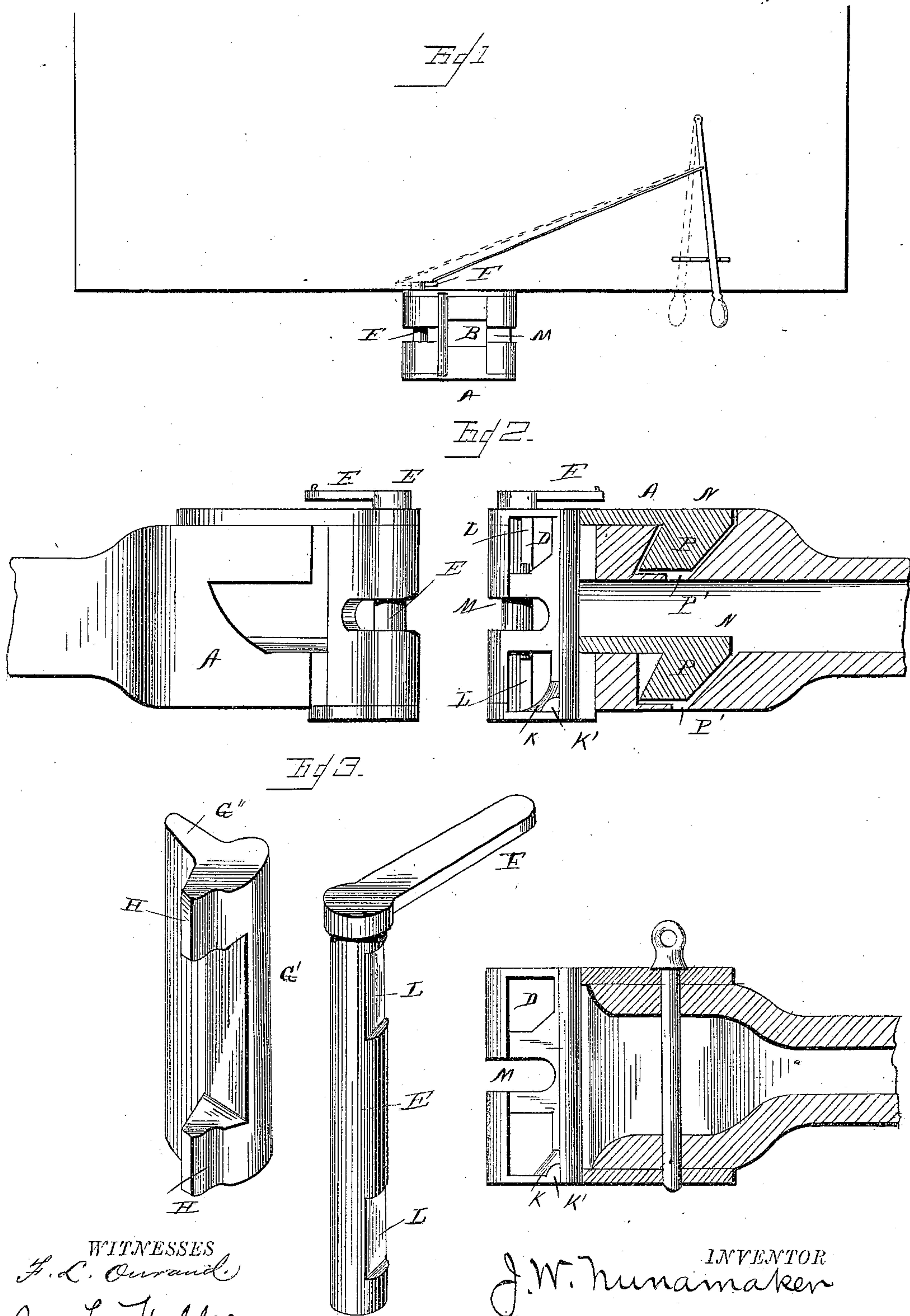
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J. W. NUNAMAKER.

CAR COUPLING.

No. 312,216.

Patented Feb. 10, 1885.



WITNESSES  
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(No Model.)

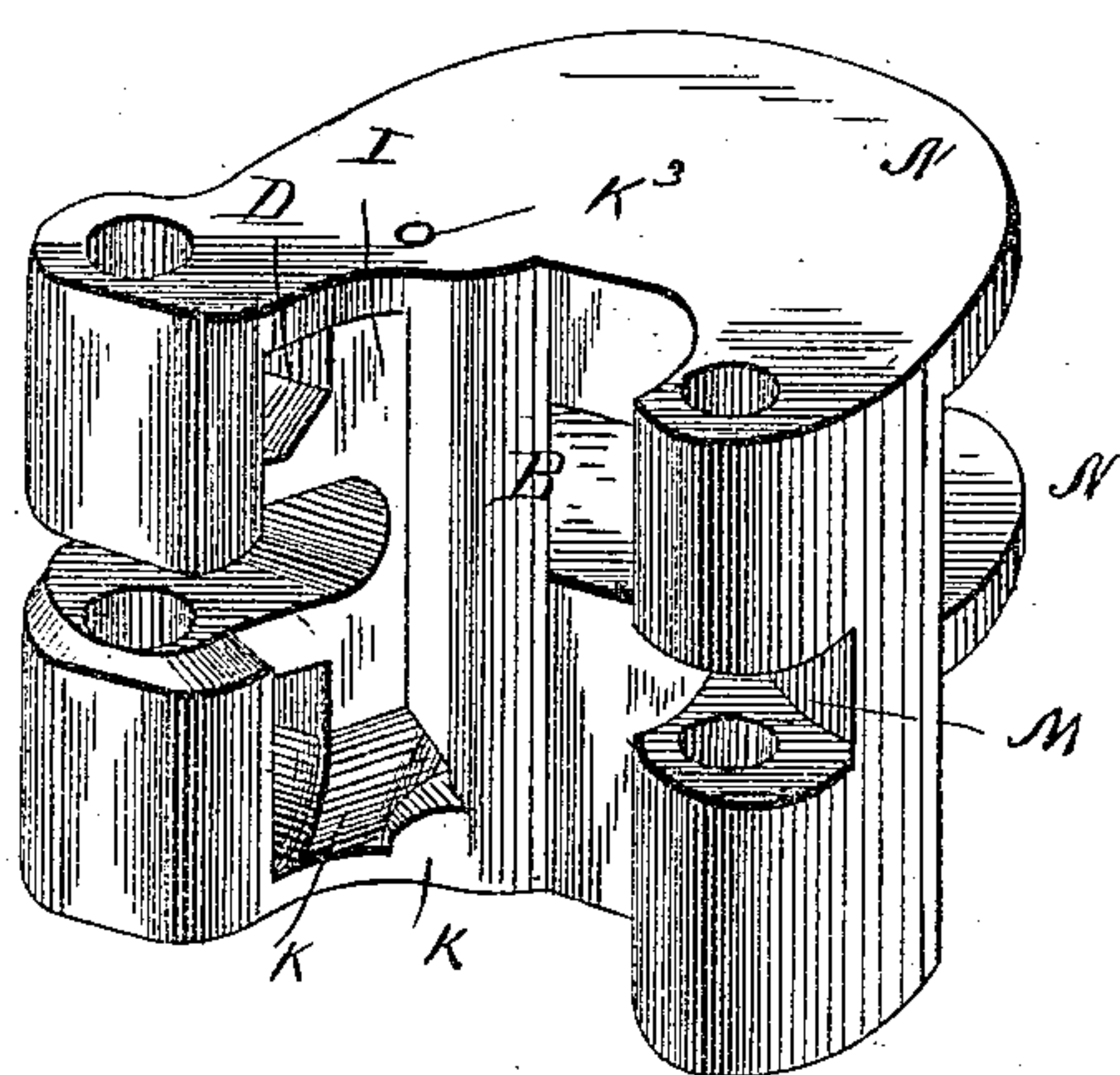
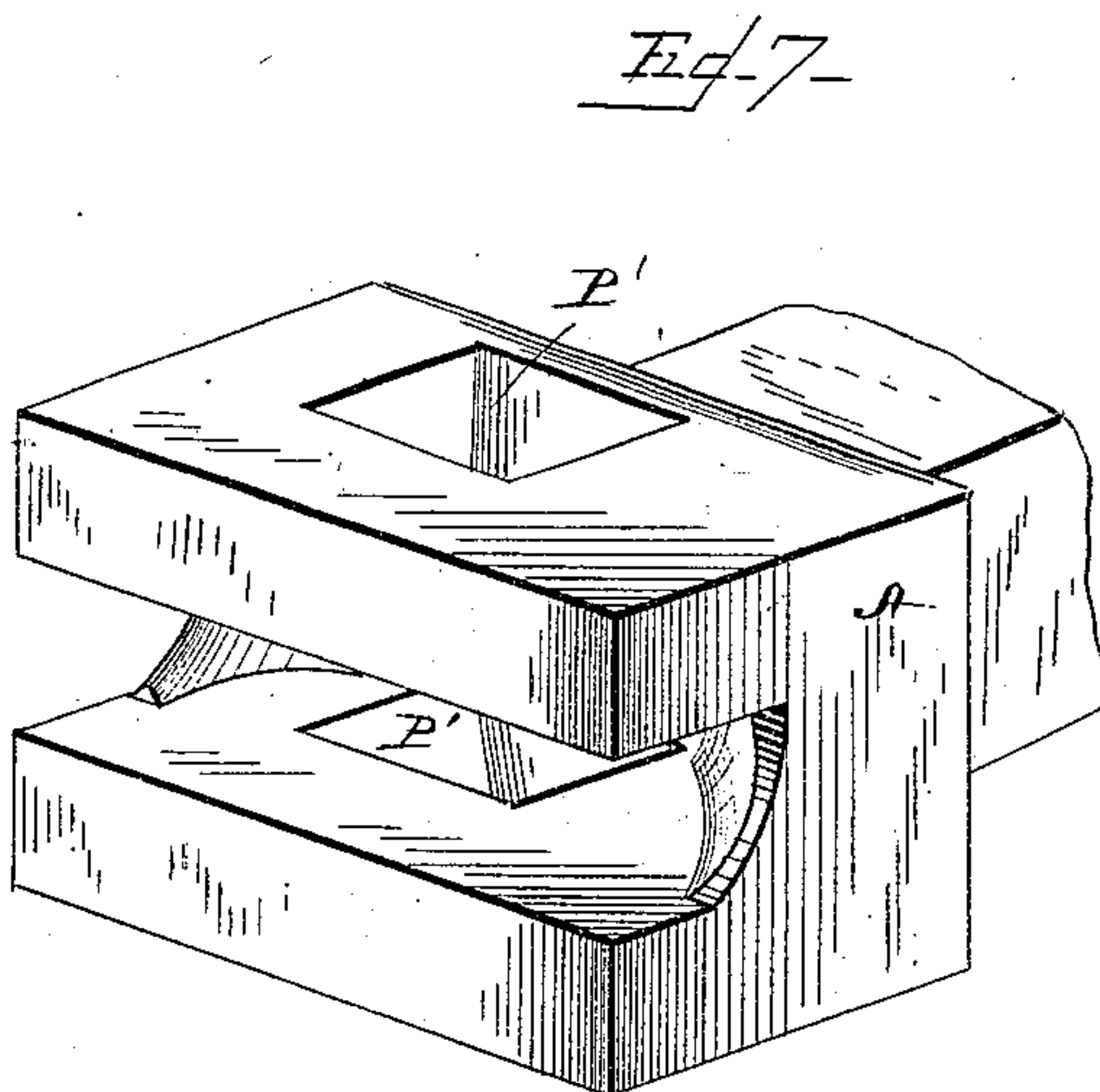
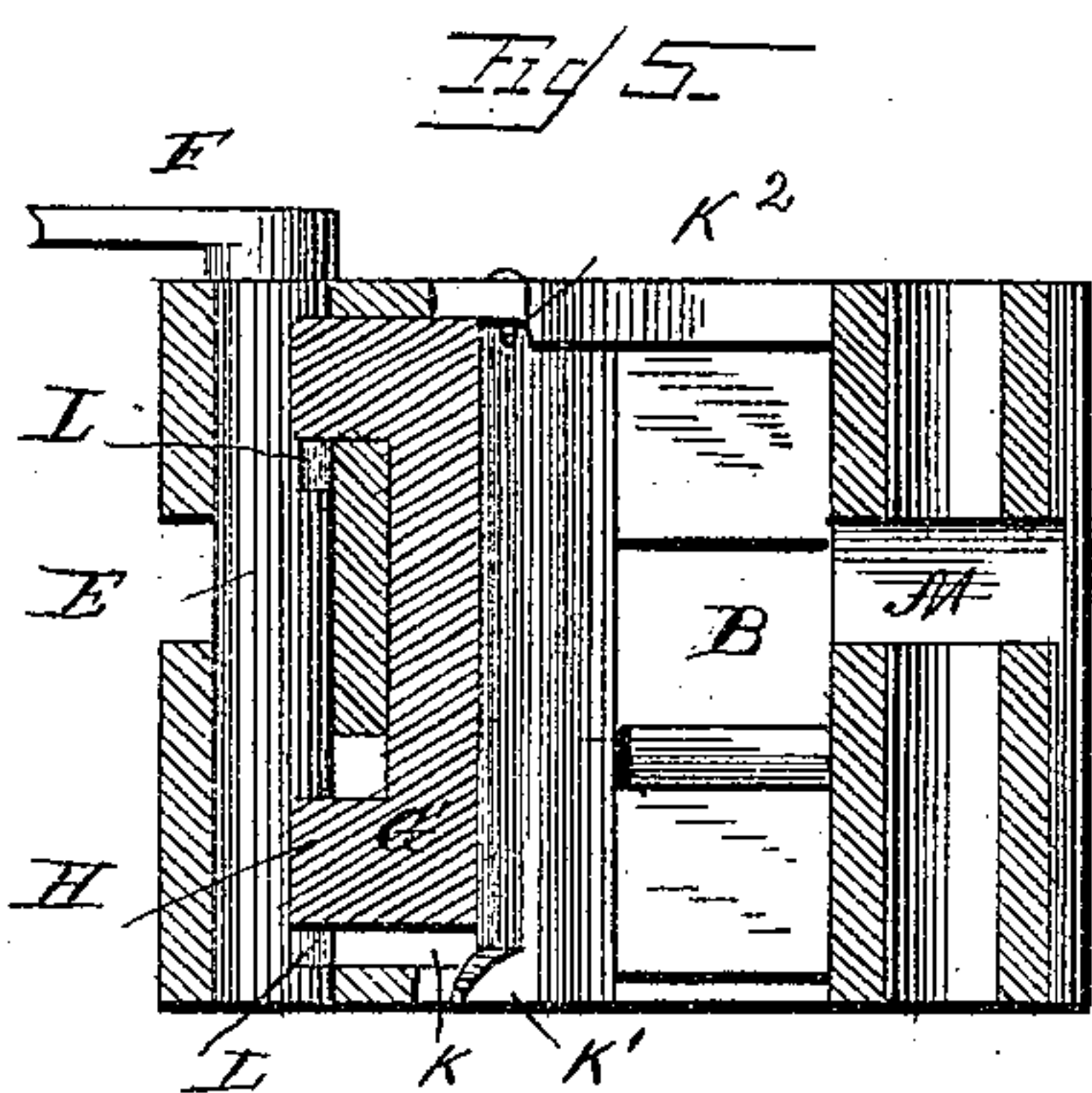
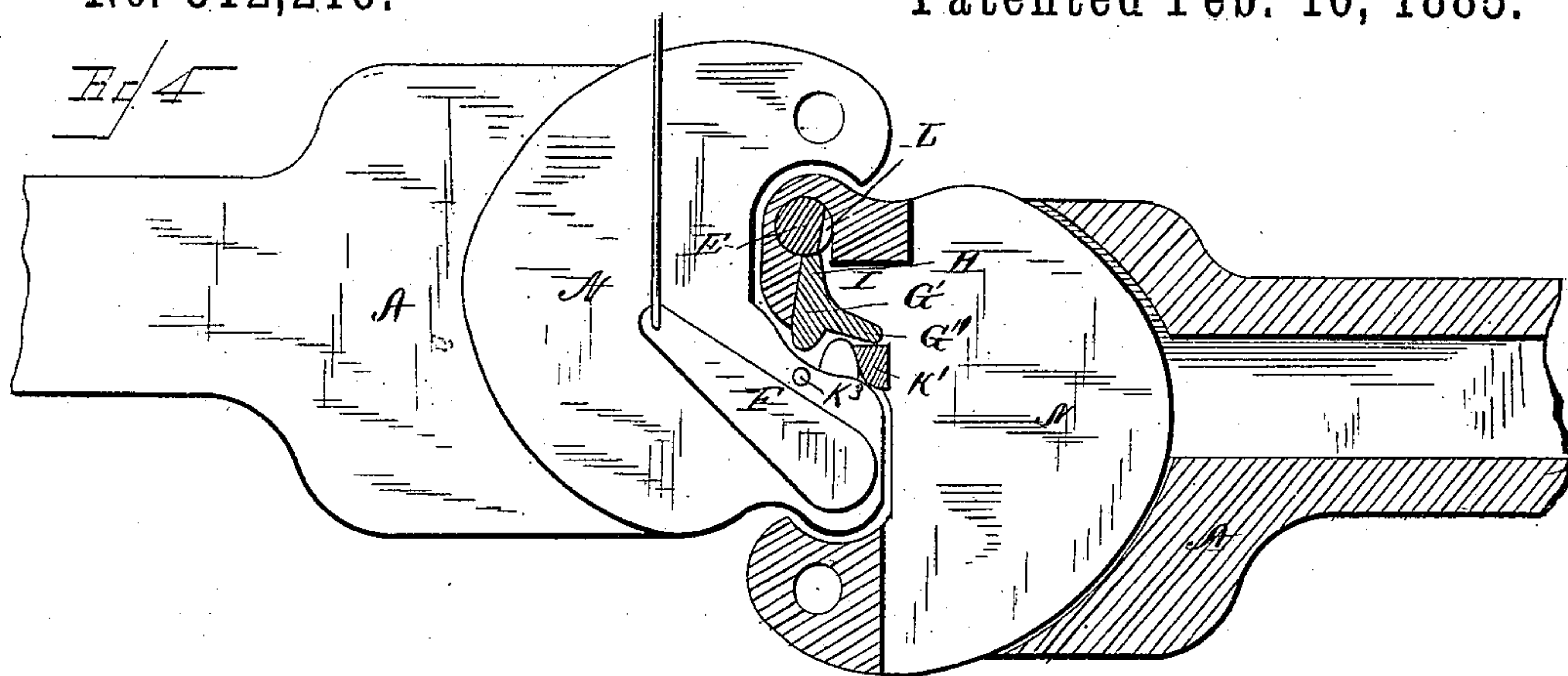
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J. W. NUNAMAKER.

## CAR COUPLING.

No. 312,216.

Patented Feb. 10, 1885.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN WILLIAM NUNAMAKER, OF KANSAS CITY, MISSOURI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 312,216, dated February 10, 1885.

Application filed November 12, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, J. W. NUNAMAKER, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in car-couplers of that class in which the coupling is effected by interlocking draw-heads; and it has for its objects to simplify the construction of the interlocking heads and render their operation more positive by dispensing with the springs ordinarily employed to operate the locking-levers; to provide a self-centering head which will automatically assume the proper position in the line of draft when the cars have abutted and become coupled, so as to permit the proper play to the heads to prevent injury, and to provide a coupling-head that may be attached to a specifically-constructed draw-head, or to an ordinary draw-bar, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents the end of a car, showing a front view of a portion of my improved coupler; Fig. 2, a view of the two interlocking draw-heads, one being shown in side elevation and the other in longitudinal section. Fig. 3 represents detached perspective views of the lock-lever and locking pin or key, whereby said lever is held to interlock the draw-heads or released to unlock or uncouple the same. Fig. 4 represents a view, partly in plan and partly in section, of the interlocking heads. Fig. 5 represents a sectional view of one of the draw-heads taken on the line *x x* of Fig. 4. Fig. 6 represents a perspective view, showing the front end of one of the draw-bars, and Fig. 7 a detached perspective view of one of the draw-heads.

In the drawings, the letter A indicates my improved draw-head, which is bifurcated or recessed in front, as indicated by the letter B, so as to form interlocking parts, which will engage for the purpose of making the coupling-connection, as more fully hereinafter explained. The coupling-head at one side, or through one member of its bifurcated portion, is provided with a vertical recess or aperture,

D, which forms a seat for the pin or key E, which is provided with an arm or lever, F, on top, by which it may be operated to operate the locking-lever, by means of which the couplers are coupled and uncoupled. The said lever (indicated by the letter G) is constructed of cast or wrought metal, having a body of approximately semi-cylindrical form with lateral lugs or extensions H and a vertical lip or flange, G', as shown in Figs. 1 and 4 of the drawings. The lock-lever sets in a recess, I, in the draw-head, and is adapted to move backward and forward therein, being kept normally to the front by its weight, the said lever working upon the inclined bearings K at the bottom of the recess, as shown in the drawings, the lever being prevented from leaving its seat by means of a flange, K', below, and a pin, K<sup>2</sup>, above, passing through the opening K<sup>3</sup> in the draw-head. The pin or key is recessed or cut away at one side at points near the top and bottom, as indicated by the letter L, through which recess the lugs of the lock-lever pass to permit the said lever to move in coupling and uncoupling the cars. The forward part of that portion of the coupling-head in which the vertical recess for the pin or key is formed is recessed, as indicated by the letter M, so that the two heads may be coupled by means of an ordinary link, which enters the recess and is held by the bolt or key in the same manner as by the ordinary coupling-pin. The draw-head at its rear is formed with parallel plates, N, which on their lower faces are provided with inclined pyramidal projections, P, which extend toward the forward end of the head. The said projections are adapted to set in the correspondingly-shaped recesses P' in the draw-bar, which is bifurcated at its forward end so as to receive the head, as plainly shown in Fig. 1 of the drawings, and allow it to yield to the shock when the cars come together, and center itself directly in the line of draft when the cars have been coupled, so as to prevent injury to the coupling, and insure the proper connection and position of the parts when coupled. By this means also a free lateral motion is permitted to the draw-heads at their connections, in addition to the ordinary lateral motion of the draw-bars.

When the coupling-head is intended to be



used in connection with a draw-bar having the ordinary draw-head, the pyramidal projections are left off of the parallel plates or removed, and the plates are caused to straddle the ordinary draw-head, and are secured thereto by means of the coupling-pin.

The operation of my invention will be readily understood in connection with the above description, and is as follows: When the two coupling-heads come together, the bifurcated portions mutually engage, the lock-levers in each falling back so as to allow the parts to interlock, the levers assuming their normal condition after the engagement of the heads, so as to interlock said heads, the levers being held in such interlocked position by turning the recessed bolts or keys so as to present the unrecessed portions to the lugs on the lock-levers and prevent their backward movement and the uncoupling of the parts.

To uncouple the cars, the pin or key is brought into such position that the lugs of the lock-lever may pass through the recesses, and fall sufficiently back and to one side to permit the draw-heads to be disengaged and the cars uncoupled.

I claim—

1. The combination, in a car-coupler, of the bifurcated draw-head having a recess at one side with an inclined bearing at the bottom,

and a lock-lever provided with a vertical locking-flange and lateral lugs, and a recessed pin or key adapted to engage said locking-lever to couple the parts and release it to uncouple the same, the locking-lever being arranged to move backward and upward on the inclined bearing in coupling and uncoupling, substantially as specified.

2. The combination, with the coupling-head, of the lock-lever adapted to move in a recess therein and assume its normal position by its own weight, and the lock bolt or key, the latter adapted to serve as a coupling-pin to hold the link, which passes through a recess in the forward part of the coupling-head, formed for the purpose, substantially as specified.

3. The combination, with the draw-head, of the parallel rearwardly-extending plates having inclined pyramidal projections on their lower faces, and the draw-bar having correspondingly-shaped recesses, with which the pyramidal projections engage and interlock, substantially as and for the purposes specified.

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

JOHN WILLIAM NUNAMAKER.

Witnesses:

CHAS. L. COOMBS,  
H. J. ENNIS.