

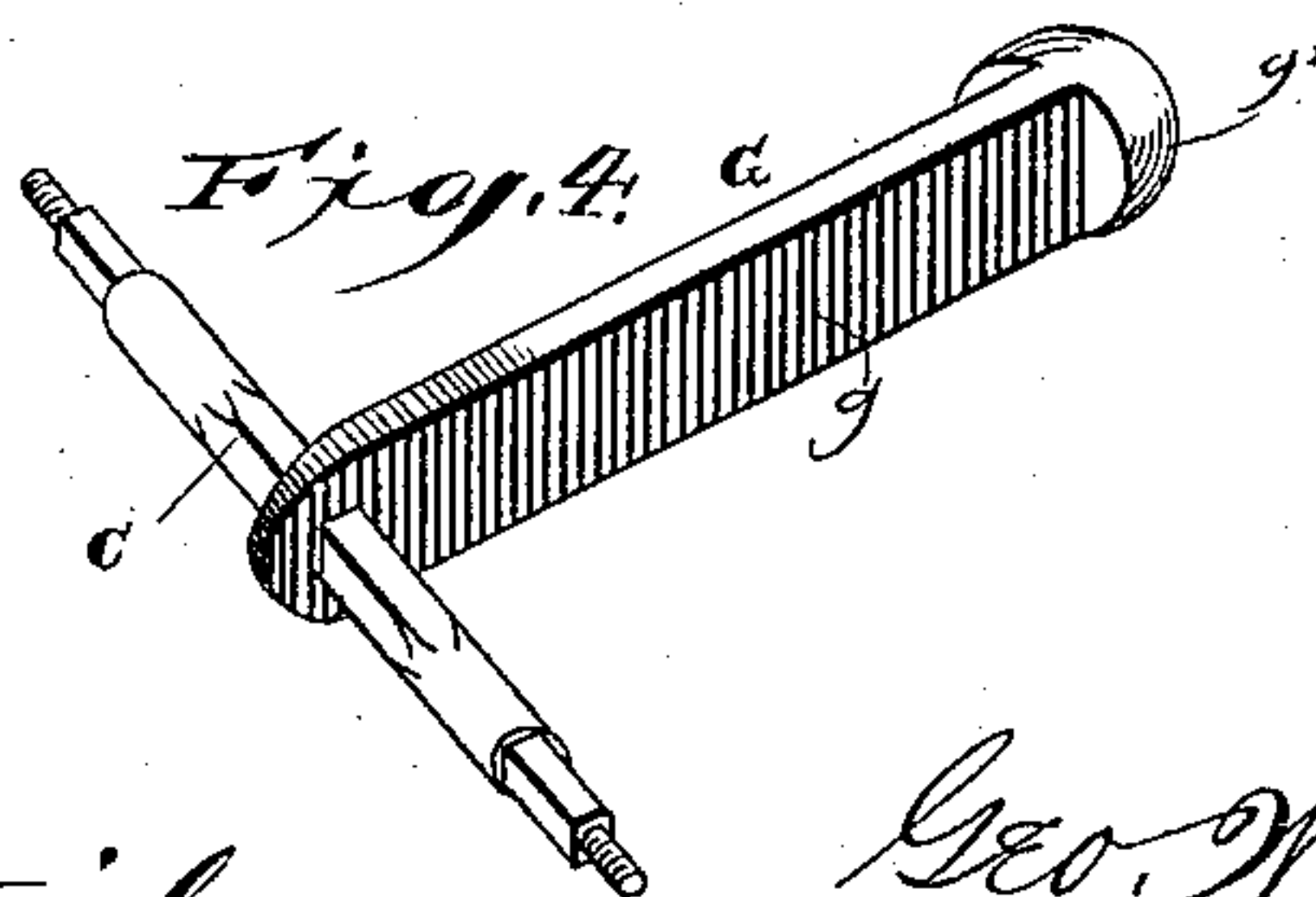
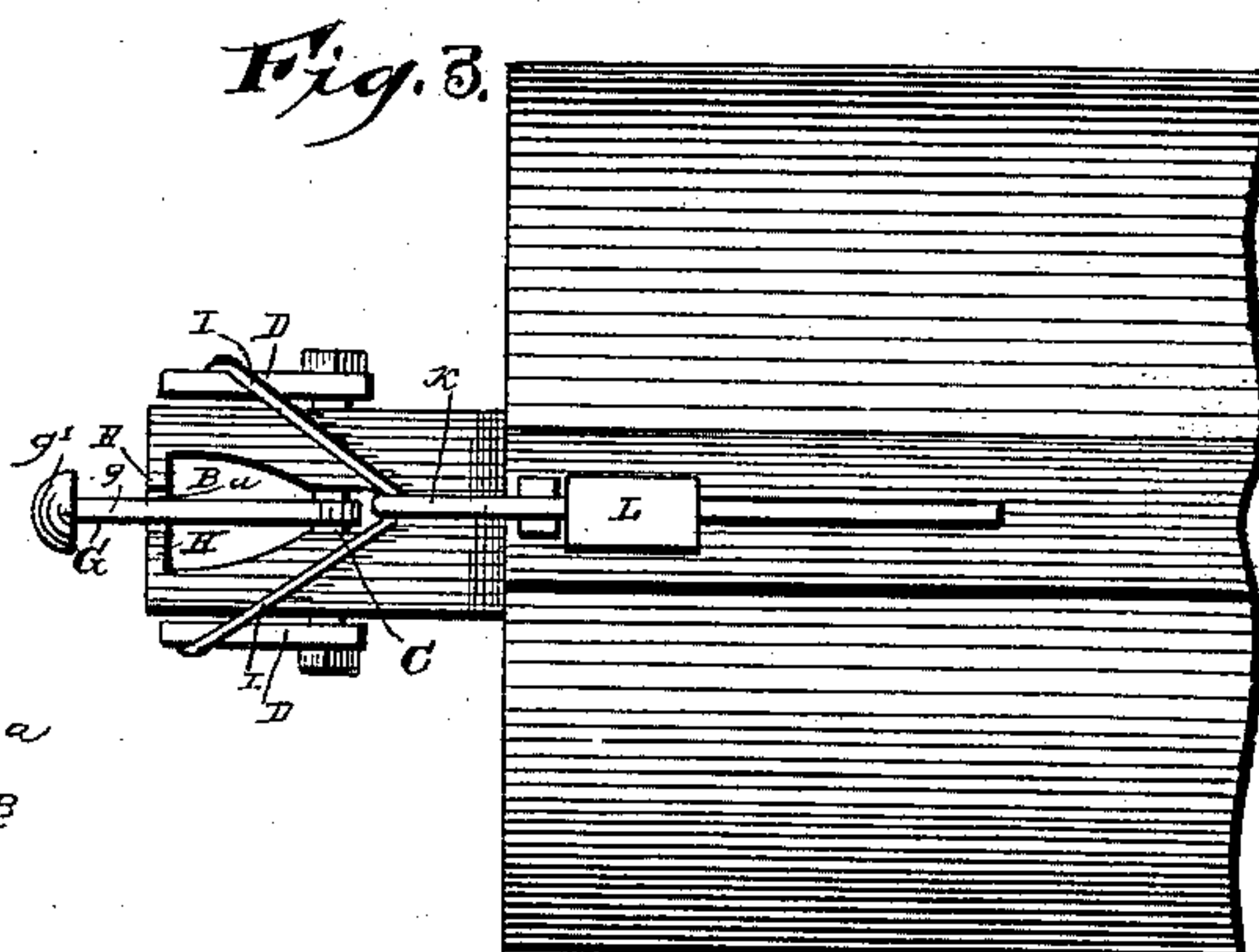
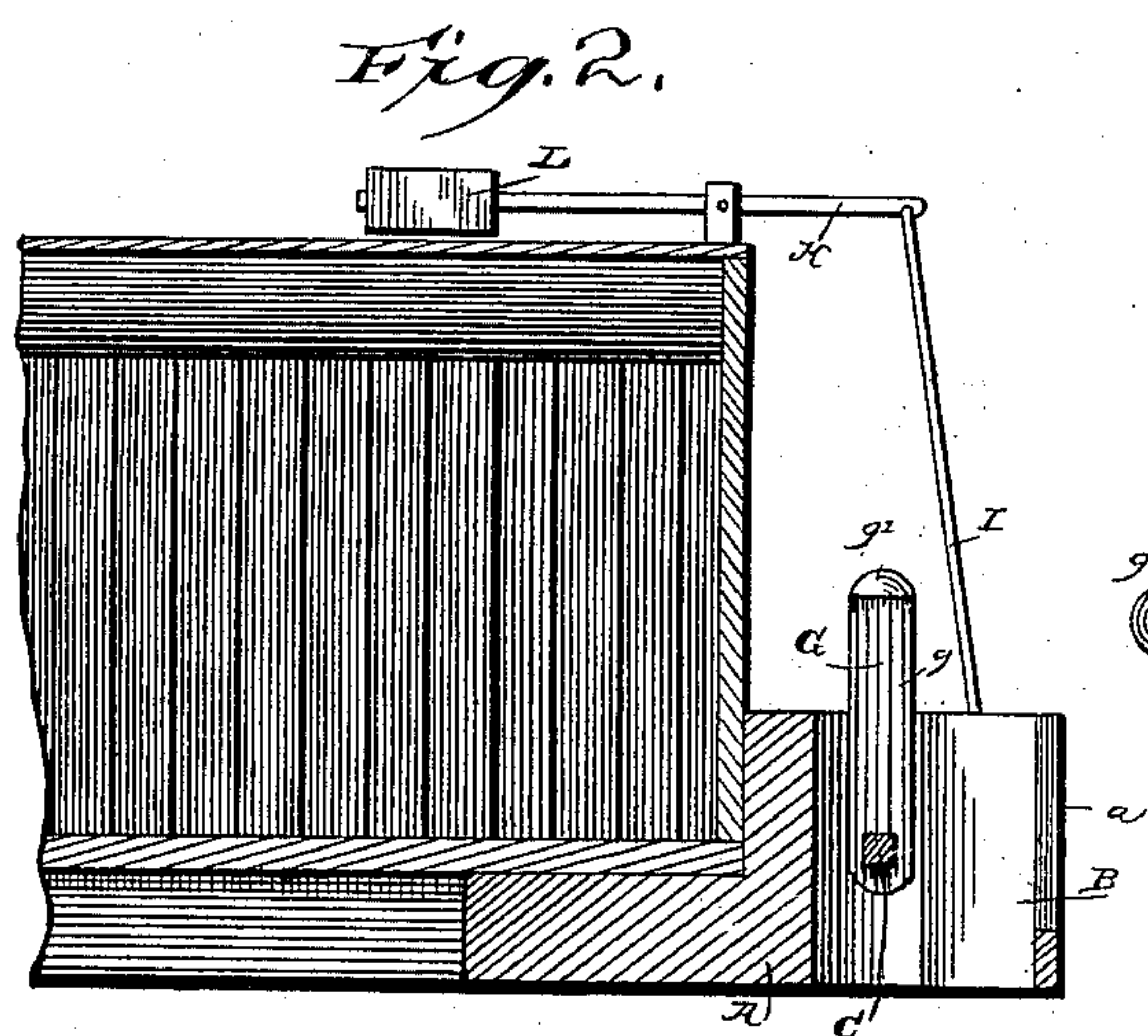
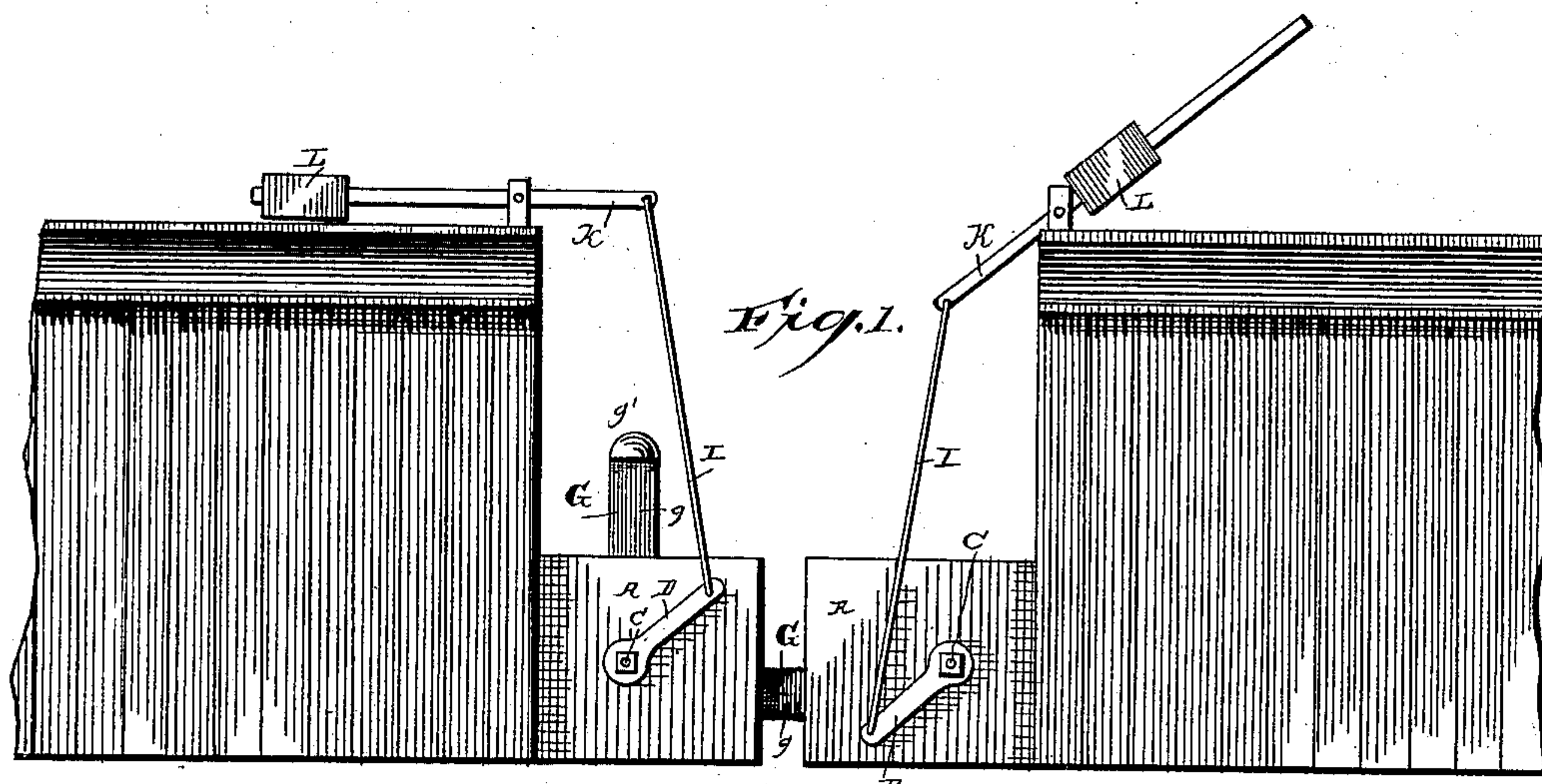
(No Model.)

G. W. LEWTON.

CAR COUPLING.

No. 369,066.

Patented Aug. 30, 1887.



Witnesses
Henry G. Dietrich
John B. Siggers

Inventor
Geo. W. Lewton
By his Attorneys
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

GEORGE WILLIS LEWTON, OF CENTRE POINT, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 369,066, dated August 30, 1887.

Application filed June 21, 1887. Serial No. 242,038. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WILLIS LEWTON, a citizen of the United States, residing at Centre Point, in the county of Linn and State of Iowa, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to an improvement in car-couplings; and it consists in a certain novel construction and arrangement of parts for service fully set forth hereinafter, and specifically pointed out in the claim.

In the drawings, Figure 1 is a side view of two cars connected together by my improved coupler. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a plan view of one of the draw-heads. Fig. 4 is a detail view of the coupling-pin, showing the shaft to which it is attached.

Referring by letter to the drawings, A designates the draw-head having the vertical slit *a* in the front end, closed at the bottom, and the vertical opening B in rear of the said slit, and extending entirely through the draw-head.

C designates a transverse shaft journaled in bearings in the sides of the draw-head, and having the crank-arms D D secured to or formed integral with the said shaft on the outside of the draw-head. Secured rigidly to the squared central portion of the said shaft is the rear end of the coupling-pin G, comprising the thin shank *g* and the ball or head *g'*. The said shank is adapted to pass down into the slit *a* in the end of the draw-head until stopped by the closed lower end thereof, and the head or ball *g'* is adapted to pass down into the opening B in the draw head of an opposing car.

The shoulders H H, formed on each side of the vertical slit *a*, by the larger opening B being in the rear thereof, are adapted to engage the head or ball *g'* and prevent it from slipping out of the draw-head.

To the extremities of the arms D D are attached the lower ends of the rods I I; and K designates a lever pivoted to the bracket *n*, at the top of the car, and to one end of the said lever are attached the upper ends of the connecting-rods L.

It will be seen that when the handle of the

lever is raised (as shown in Fig. 1 on one car) the coupling-pin will be down and in engagement with the opposite draw-head, and when the handle of the lever is down (as shown in Fig. 1 on the other car) the coupling-pin is raised out of the way.

L designates an adjustable weight on the handle of the lever, adapted, when it is designed to hold the pin out of engagement, to be moved out to the extremity of the lever, and thus hold the end thereof down. When a coupling is about to be or is made the weight is moved up close to the pivot of the lever, and thus allows the said lever to maintain an upright position.

It will be seen that, if so desired, both coupling-pins may be lowered to engage, respectively, in the opposite draw-heads, one resting over the other; but it would ordinarily be found unnecessary. The shank of the pin is allowed some lateral play in the vertical slit, and as the rounded head on the end thereof operates in a large vertical opening in the head, in rear of the said slit, it is evident that the coupling between two cars will bend and allow the cars to turn a curve very readily.

The draw-heads being open from the upper to the lower side, rain, dust, cinders, &c., cannot accumulate therein and interfere with the operation of the coupler, as might happen if the lower ends of the said draw-heads were closed. The construction of my coupler is, moreover, so simple, and the action of coupling and uncoupling so direct, as to render it almost impossible to be put out of order.

It will be seen that as the coupling is not actuated by gravity the slit in the front end of the draw-head may be extended from top to bottom, and the pin swung down to uncouple, instead of up, this being desirable under certain circumstances, owing to there being less space taken up.

The differences in height which exist between the bottoms of cars (and consequently the differences in height of the coupler from the track) will not affect the effectiveness of this coupler, as the slit *a* and opening B therein are of sufficient length to allow of considerable difference in height before the pin passes out of engagement; also, the vertical motion of the couplers, caused by the rocking of the

cars, will not occasion any jar or straining of the coupler, as the coupling-pins will slip easily up and down in the draw-heads.

Having described my invention, I claim—

- 5 The combination, in a car-coupler, of the draw-head having the vertical opening therein, shaft C, having a crank-arm, D, pin G, secured on the said shaft, lever K, connected with the said crank-arm, and the adjustable weight L,

sliding on the said lever, all arranged and operated substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE WILLIS LEWTON.

Witnesses:

H. M. ROWLEY,

GEO. B. DUNBAR.