

(No Model.)

G. W. GERKING & E. S. LEWIS.
CAR COUPLING.

No. 411,891.

Patented Oct. 1, 1889.

Fig. 1.

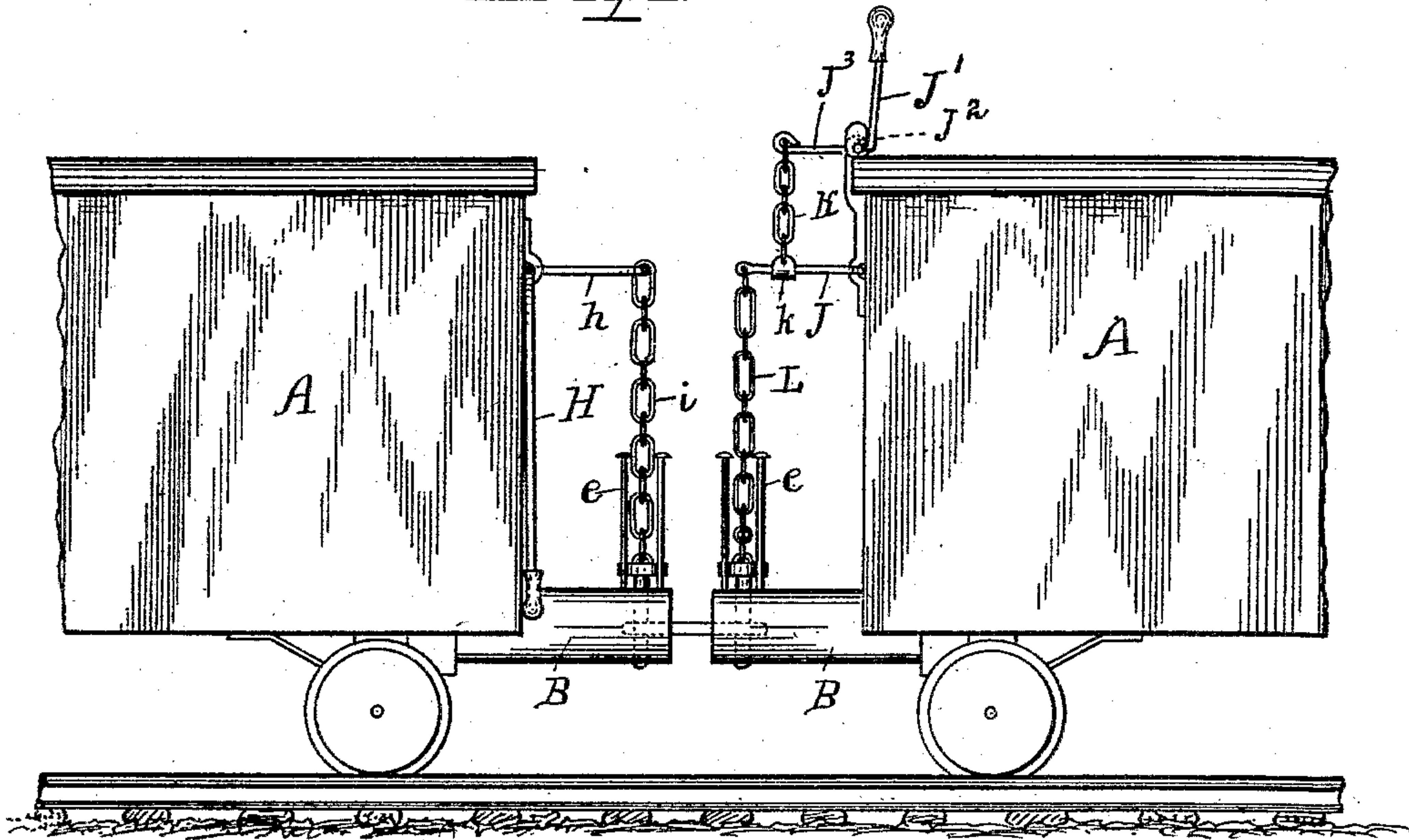


Fig. 2.

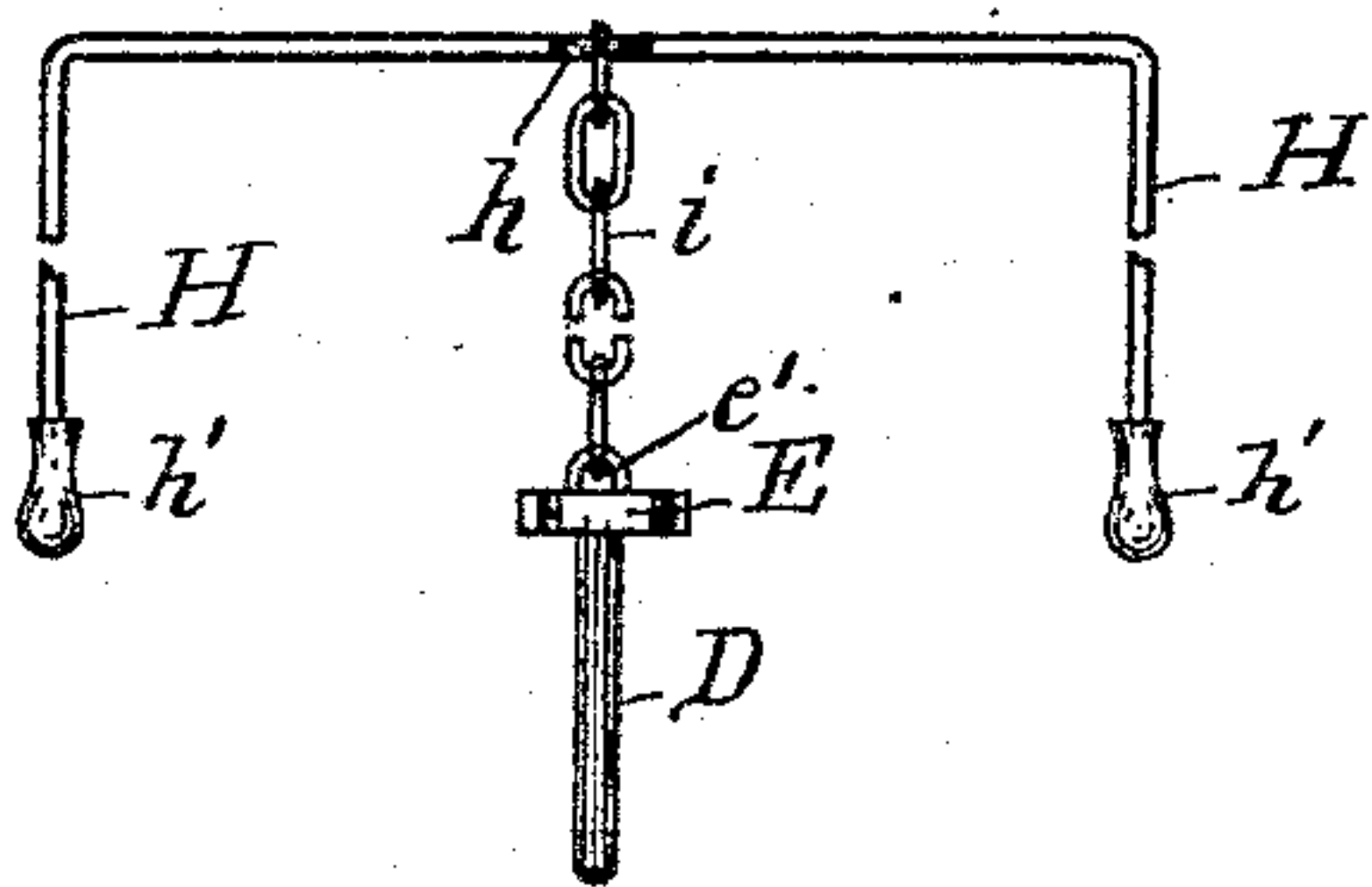


Fig. 3.

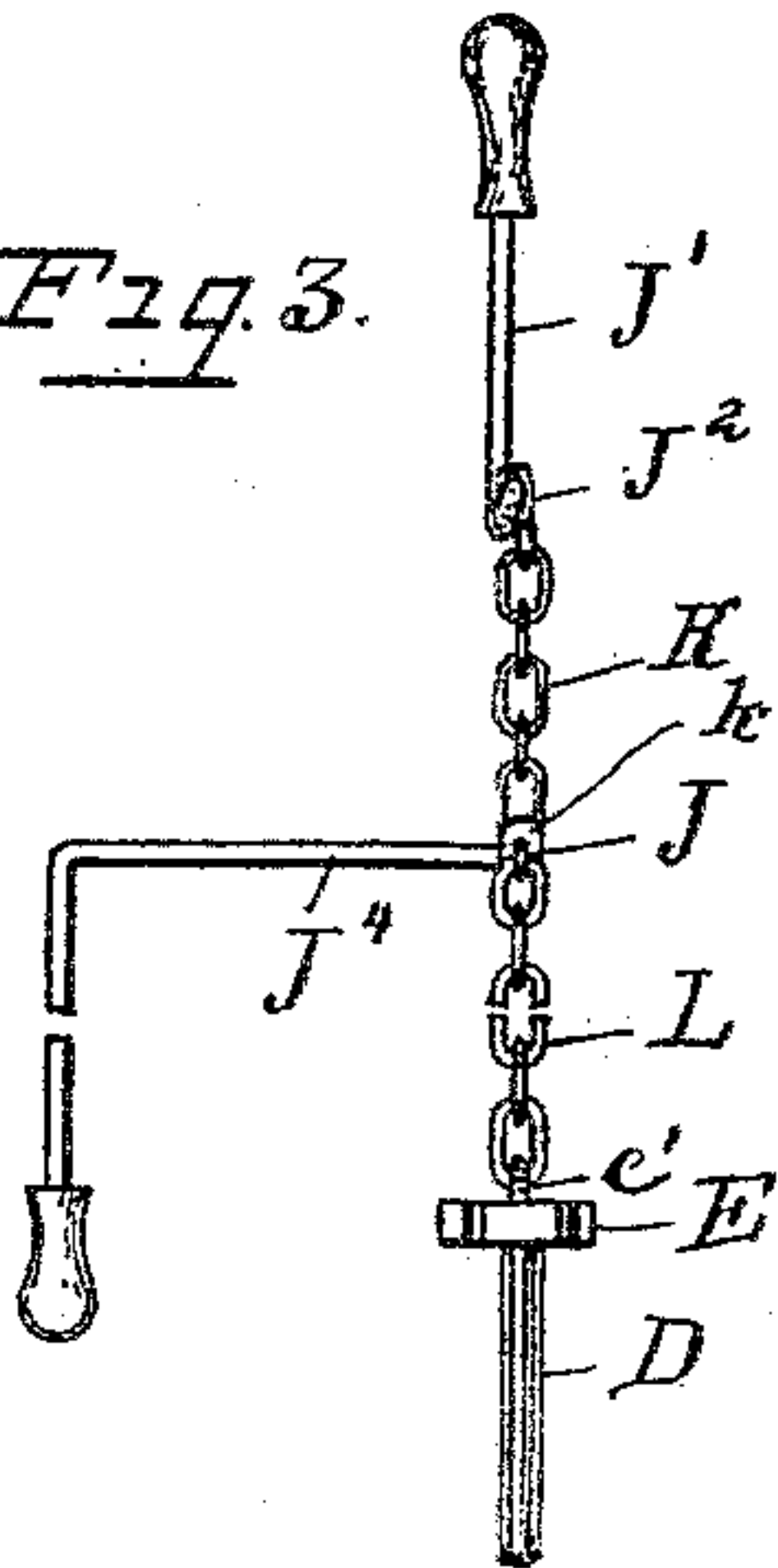
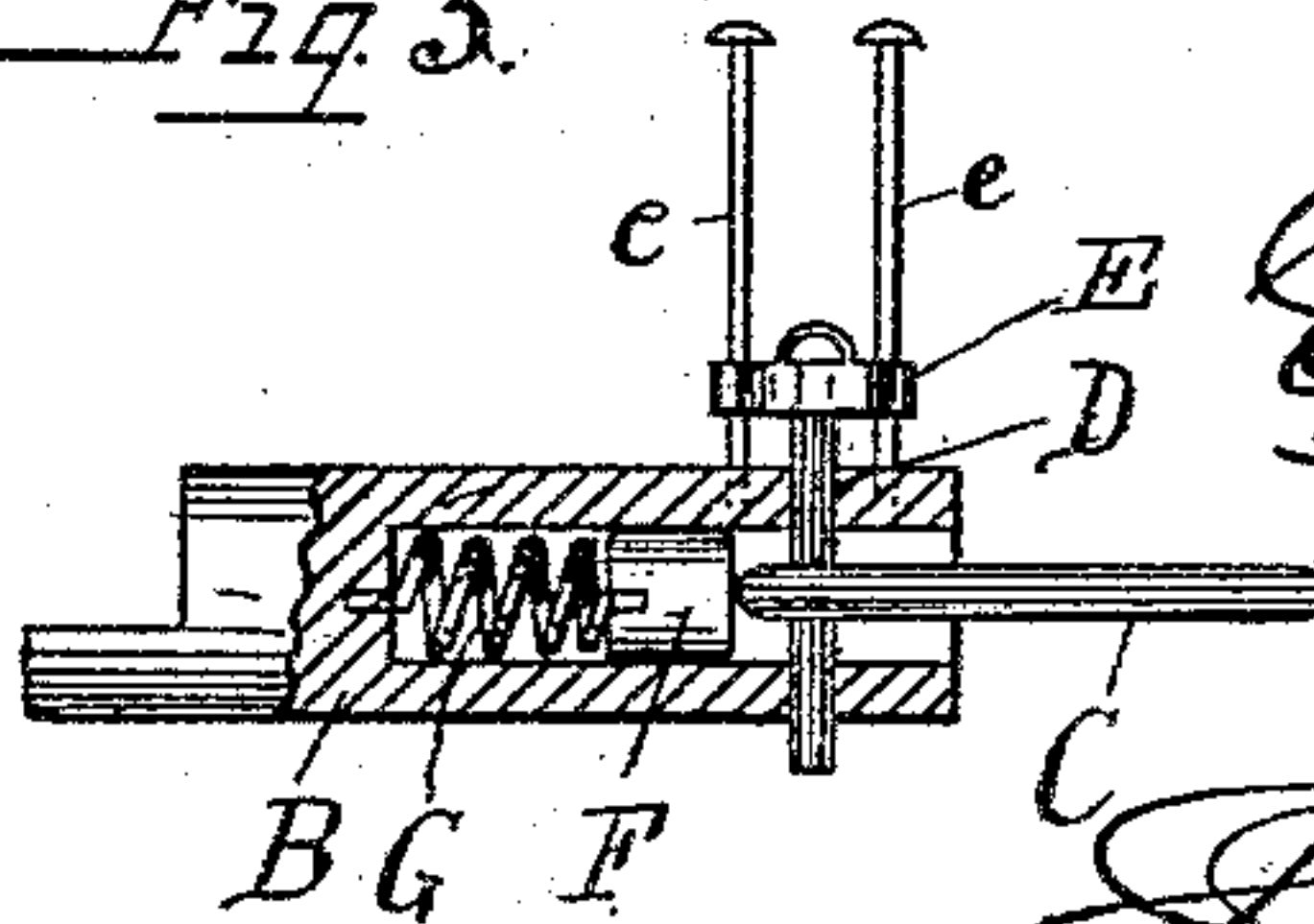


Fig. 4.



Fig. 5.



WITNESSES:

R. A. Balderson.
S. Stansbury

George W. Gerking
and
Enoch S. Lewis
INVENTORS

By
J. P. Brainerd
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE W. GERKING AND ENOCH S. LEWIS, OF INGRAHAM, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 411,891, dated October 1, 1889.

Application filed June 13, 1889. Serial No. 314,177. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. GERKING and ENOCH S. LEWIS, of Ingraham, in the county of Clay and State of Illinois, have invented certain new and useful Improvements in Car-Couplings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to car-couplers; and its objects are, first, to obviate manual interposition to couple and uncouple the cars; second, to guide the pin invariably into a correct position relatively to the link; third, to permit the operation of the pin either from the side or top of the car; fourth, to diminish the jar incident to the act of coupling, and, fifth, to accomplish these ends with structural simplicity and economy.

We attain these ends by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of the adjacent ends of two cars coupled according to our invention. Fig. 2 is a detail view of the manner of operating the pin from the side of the car. Fig. 3 is a similar view of an alternative method of operating the pin either from the top or the side. Fig. 4 represents a plan view of the head of the pin. Fig. 5 is a detail view, partly in section, of the draw-head.

The same designations indicate corresponding parts in the several views.

Under existing methods it is a prolific source of danger to the operators to couple and uncouple cars, and it is well recognized as such by those entrusted with the management of the rolling-stock of a railway. The latter, on the other hand, are deterred from altering the present construction on account of the difficulty of coupling cars of different altitudes with the forms of couplers now offered on the market as substitutes. Hence we have devised an apparatus that will reconcile these opposing considerations, and thus increase the security of human life.

The cars A A are provided with counterpart draw-heads B B, in which the buffer-blocks F, acting against the resiliency of the springs G, are located. Superposed over the draw-heads are the guides *e*, between which the head E of the pin D reciprocates, having to this end the grooves *e*², which span said guides, the heads whereof limit the movement.

A link *e'*, attached to the head E, serves to attach thereto the operating-chain, which is designated *i* in the form illustrated in Fig. 2, and is marked L in the modification shown in Fig. 3. The chain *i* is actuated by the arm *h* of the lever H, having handles *h'* attached to the car, so as to be accessible from either side. The chain L is operated by the arm J, pivotally attached to the end of the car, which in turn is impelled by the chain K, secured thereto by the clip *k* by means of the lever J³, from which its upper end is terminally suspended. This lever J³ is mounted in the bearing J², and is bent upwardly to form a handle J', that can be moved from the top of the car. The arm J can also be operated from the side of car by the handled lever J⁴. C indicates the link. It will thus be apparent that the pin can be operated by means of the modification shown in Fig. 3, either from the side or the top of the car, while in the form shown in Fig. 2 it can only be actuated from either side.

Having thus fully described our invention, what we claim is—

The cars A A, provided with counterpart draw-heads B B, containing the cushioned buffer-blocks F, in combination with the headed pin D, moving in said guides, the link C, the chain L, and the arm J, movable either by the lever J⁴ or by lever J³ through the chain K, the whole co-operating in the manner, for the purpose, and in the correlation herein fully shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE W. GERKING.
ENOCH S. LEWIS.

Witnesses:

JACOB D. SHADLE,
HARVEY F. PIXLEY.