

(No Model.)

F. L. MARK.

CAR COUPLING.

No. 353,150.

Patented Nov. 23, 1886.

Fig. 1.

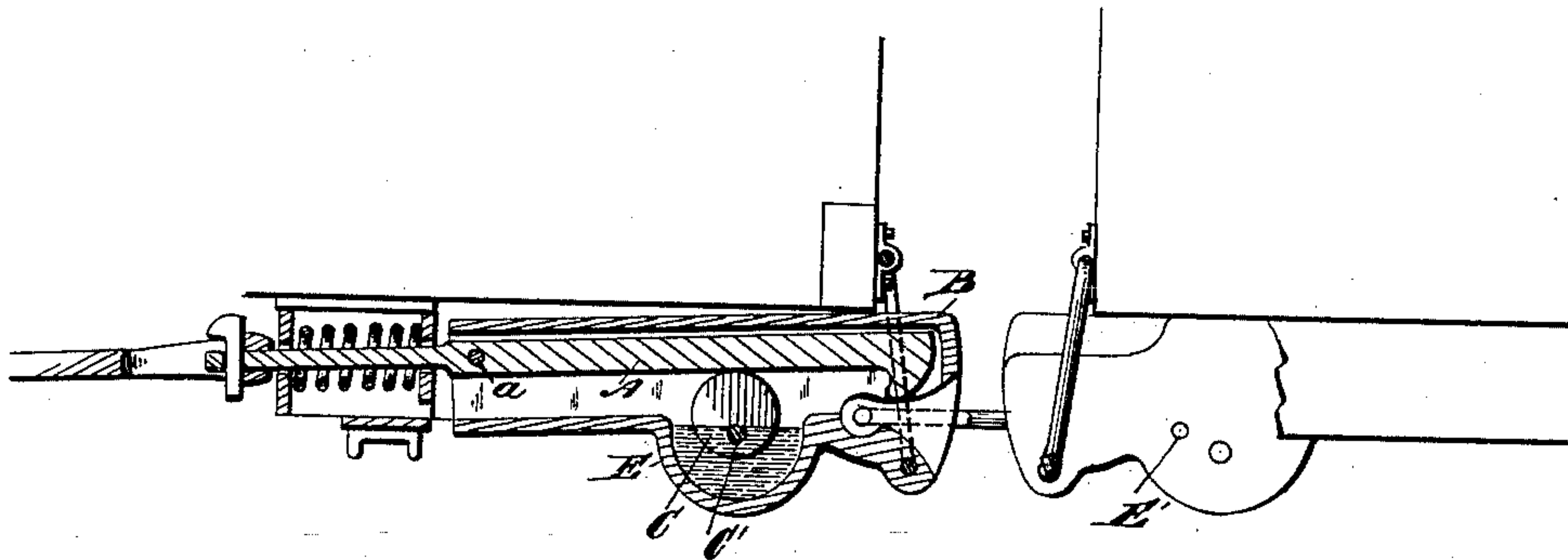
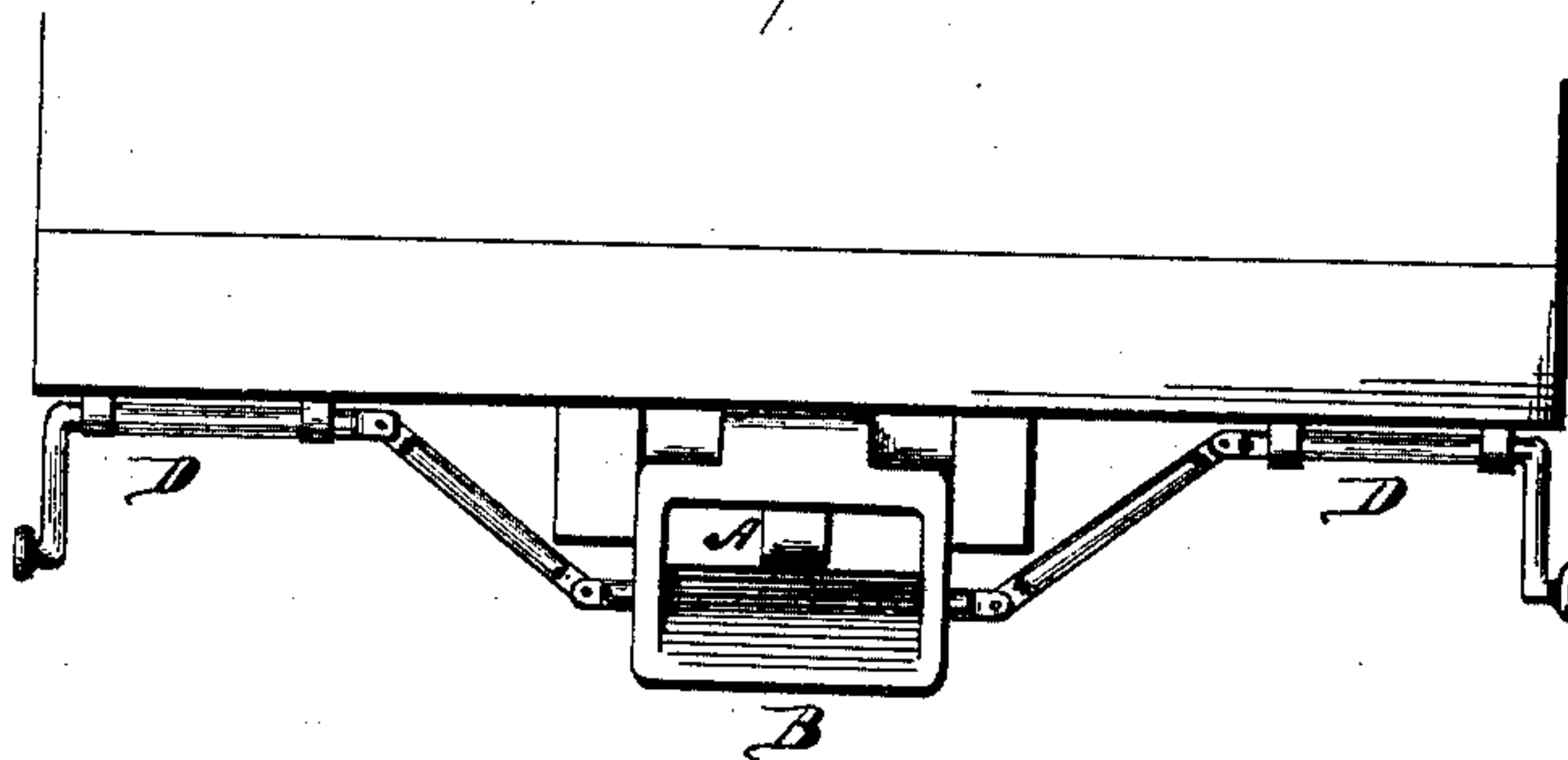


Fig. 2.



WITNESSES

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FRED. L. MARK, OF CLIO, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 353,150, dated November 23, 1886.

Application filed September 22, 1886. Serial No. 214,263. (No model.)

To all whom it may concern:

Be it known that I, FRED. L. MARK, of Clio, county of Genesee, State of Michigan, have invented a new and useful Improvement in Car-Couplers; and I 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 pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the combinations of devices and appliances hereinafter specified, and more particularly pointed out in the claim.

My invention relates to that class of car-couplers which are operated by means of a crank and connecting lever through the medium of the cam-shaft operating from the side of the car, and is more particularly an improvement on a patent granted to C. E. Mark, dated April 15, 1884, No. 296,859.

In the drawings, Figure 1 is a sectional view, partly in elevation, of a device embodying my invention. Fig. 2 is a front elevation of the same.

It will be seen by reference to the drawings that the draw-bar A is pivotally connected by a bolt, *a*, to the buffer B. A cam, C, is eccentrically secured upon the shaft C', which is suitably journaled below the bottom of the buffer. The cam-shaft is connected at each end by means of a universal-joint connection to the connecting-rods, which are in turn connected by similar joints with the inner ends of the crank-shafts D.

It will be seen that by rotating the cam the draw-bar can be raised or lowered for securing or releasing the link of the adjacent car,

as may be desired; but it has been found by practice that the cam cannot be readily rotated after having once raised the draw-bar, on account of the great friction produced by the impact of the adjacent car and other causes—such as rust, &c.—causing great annoyance and preventing its general adoption.

It is the object of my invention to obviate this difficulty by providing an oil-chamber, E, directly under the cam, which may be cast integrally with the buffer, or it may be attached thereto in any suitable manner. By rotating the cam it will carry sufficient oil with it to cause the cam to be easily released when required.

E' represents an opening for filling the oil-chamber.

It will also be seen that the oil flowing down from the cam along the shaft will keep it sufficiently lubricated, and also prevent any possibility of rusting.

With my improvement the device has been found to work in a very satisfactory manner.

What I claim as new, and desire to protect by Letters Patent, is—

In combination with a car-coupler provided with suitable cam mechanism for raising the draw-bar, an oil-chamber located beneath the cam, whereby said mechanism can be lubricated, substantially as and for the purpose described.

In testimony whereof I sign this specification in the presence of two witnesses.

FRED. L. MARK.

Witnesses:

CHARLES H. MAY,
WM. H. DAVIS.