

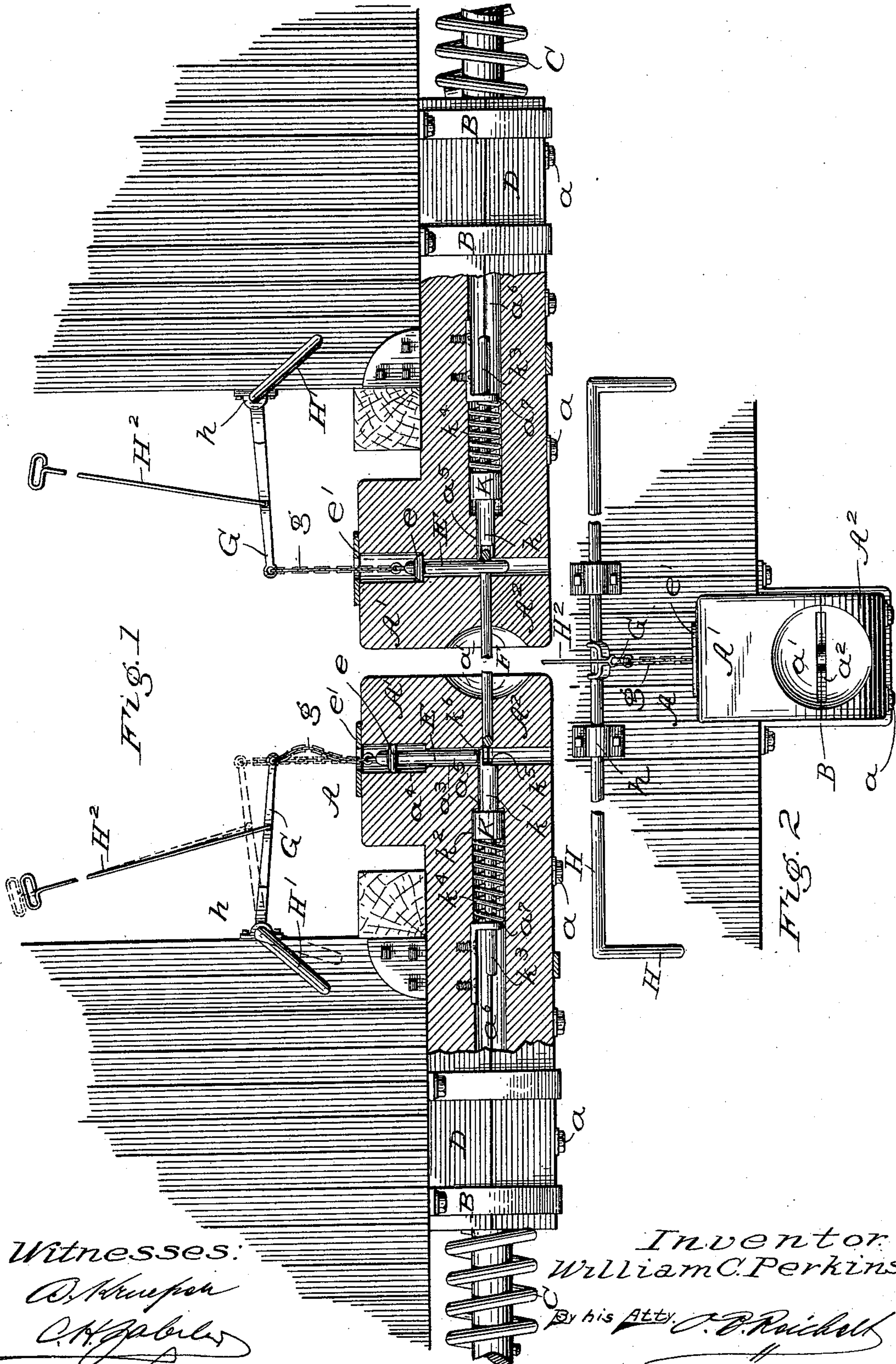
(No Model.)

2 Sheets—Sheet 1.

W. C. PERKINS.
CAR COUPLING.

No. 602,359.

Patented Apr. 12, 1898.



Witnesses:

A. H. Henson
C. H. Gable

Inventor
William C. Perkins

By his Atty. *J. D. Richelt*

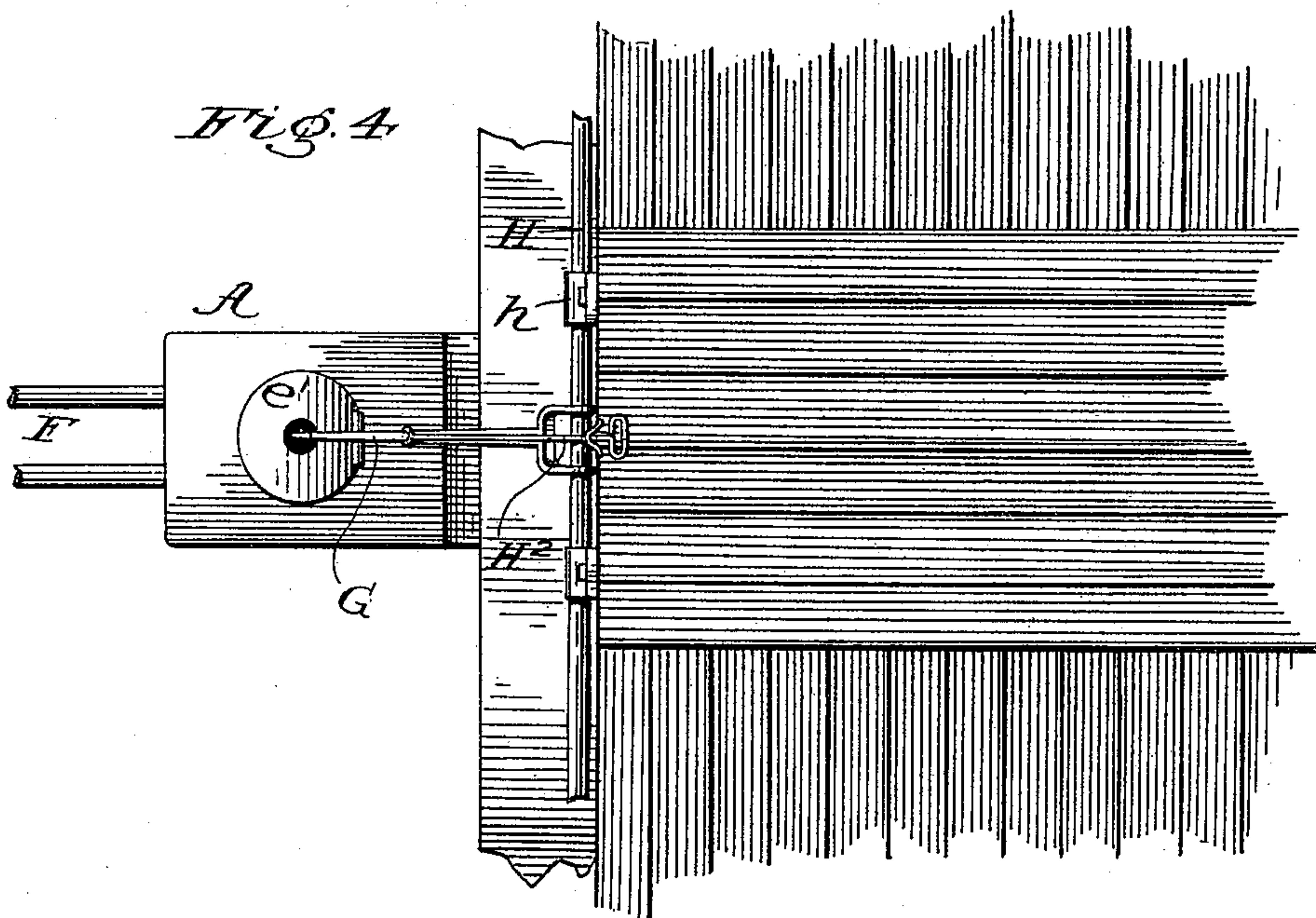
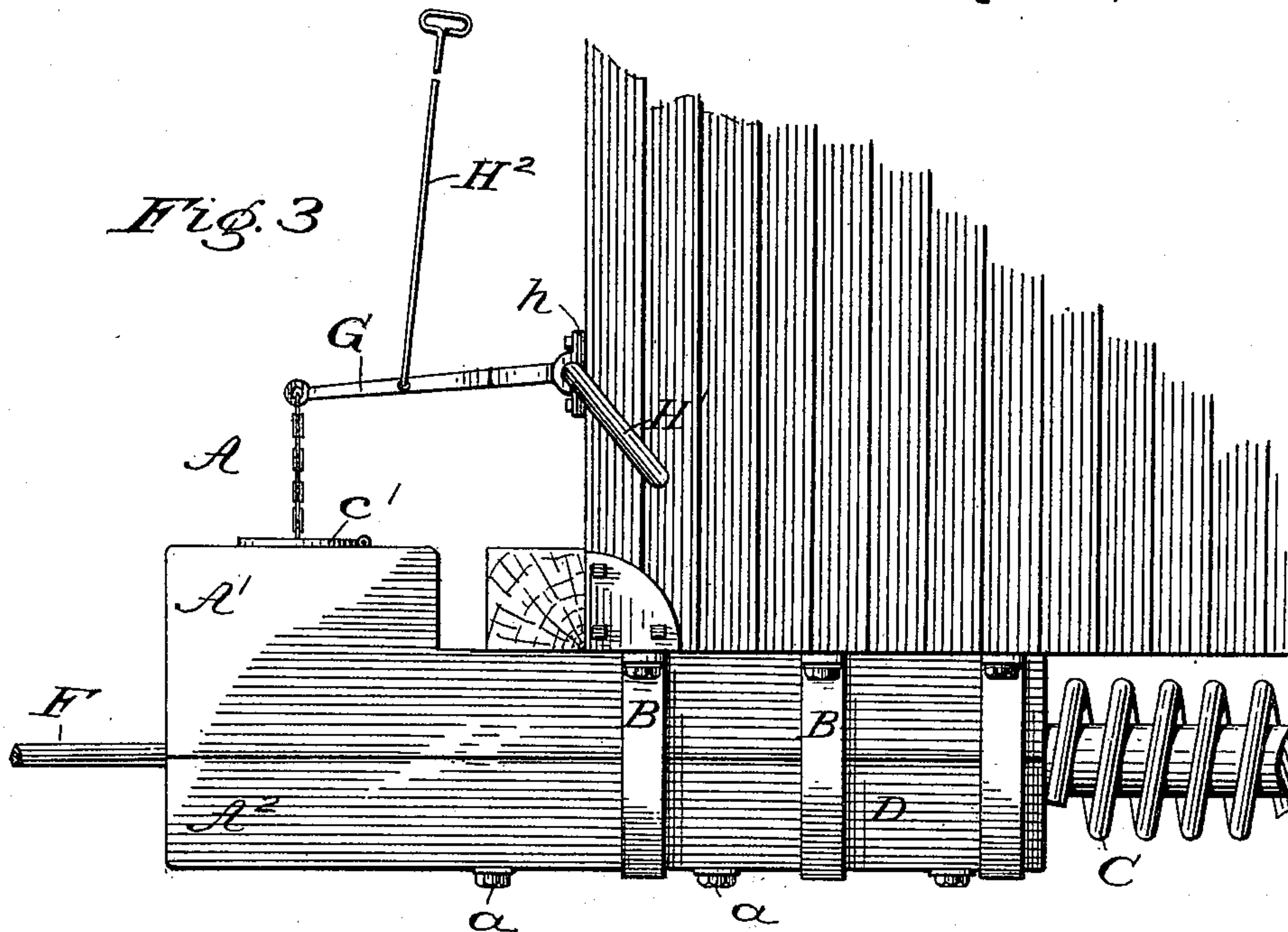
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2 Sheets—Sheet 2.

W. C. PERKINS.
CAR COUPLING.

No. 602,359.

Patented Apr. 12, 1898.



Witnesses.

Wm. C. Perkins

C. H. Zacher

Inventor
William C. Perkins

By his Atty. *C. B. Reichelt*

UNITED STATES PATENT OFFICE.

WILLIAM C. PERKINS, OF ROCKY HILL STATION, KENTUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 602,359, dated April 12, 1898.

Application filed December 21, 1896. Serial No. 616,477. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. PERKINS, a citizen of the United States, and a resident of Rocky Hill Station, in the county of Edmonson and State of Kentucky, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to an improvement in link-and-pin car-couplers; and the invention pertains more especially to the means for mechanically and automatically operating the coupling-pin to raise and lower the same in uncoupling and coupling cars, respectively.

The invention consists in the parts shown in the drawings, described in the specification, and more particularly pointed out in the claim.

In the accompanying drawings, which illustrate my invention, Figure 1 is a longitudinal section through two connecting draw-heads and couplings, with the adjacent parts of the cars and the pin-lifting device in elevation; Fig. 2, a front elevation of one of the draw-heads and of the adjacent parts of a car and the pin-lifting device; Fig. 3, a side elevation of my improved coupling and the adjacent parts of a car, and Fig. 4 a plan view of said coupling and adjacent parts of a car.

The draw-head A is made in two sections A' A², divided horizontally in the line of the draw-bar and links, said sections being securely held together by bolts *a*, which pass vertically through the sections at the sides thereof, and the two sections forming the draw-head are held up against the under side of the frame of the car by means of wrought-iron or steel straps B, which allow the couplings head endwise movement against the back pressure of coiled buffer-springs C, encircling the draw-bar D and held between a transverse frame-piece of the car (not shown) and the end of the draw-head.

The end of the draw-head is recessed at *a'* and provided with a horizontal link-recess *a²*, extending diametrically and centrally from the recess *a'* to a point beyond a coupling-pin hole *a³*, which passes vertically through the draw-head from top to bottom thereof and has an enlargement *a⁴* at its upper end to receive the head *e* of a coupling-pin E, the bottom of

said enlargement *a⁴* providing a seat for the coupling-pin when it is dropped down to engage with the link F when the latter has been pushed into the recess *a²*, and thus secure the free end of the link to the draw-head. A cap *e'*, having a small chain-hole therein, prevents the pin from being pulled out or stolen, and a chain *g*, passing through said plate, is secured at one end to a ring in the end of the coupling-pin and at the other end to a lever G, secured to a rock-shaft H, supported in bearings *h* transversely to the end of the car, and the ends of the rock-shaft H are provided with crank-levers H', by which means the said shaft and lever G, attached thereto, may be operated to lift the chain and coupling-pin when the couplings are to be placed in position to be automatically coupled. A rod H² extends from the lever G to the top of the car, and the said lever and coupling-pin connected therewith may thus be operated from the top of the car when required.

The draw-head has a central longitudinal aperture *a⁵* therein, communicating with the link-recess *a²* at its juncture with the coupling-pin hole *a³*, which receives the forward reduced portion *k'* of a propeller-block K, the rear and enlarged end *k²* of which moves freely in an enlarged extension-aperture *a⁶* of the central longitudinal aperture *a⁵*, and a bearing-plate *a⁷*, secured within the said extension-aperture *a⁶*, carries a guide-pin *k³*, projecting rearwardly from the propeller-block K, and also serves as an abutment for the end of a coiled spring *k⁴*, which encircles the guide-pin *k³* and bears at its forward end against the enlarged end *k²* of the propeller-block K and holds the latter normally pressed to the forward end of its recess. The forward end *k'* of the propeller-block is recessed upon the under side at *k⁵* to receive the end of the link F and hold the latter in a horizontal position to connect with the car to be coupled. The lip *k⁶* thus formed above the recess *k⁵* when the link is withdrawn from the draw-head will project across the coupling-pin hole *a³* and hold the coupling-pin up until the link again pushes back the propeller-block and allows the pin to fall therein.

The coupling-pin may be easily operated from either side or from the top of the car, as

may be desired, and the said pin will fall automatically when the link is pushed into the draw-head as the cars come together.

5 The draw-head is made in a simple, strong, and effective manner and will hold together under all conditions to which it may be subjected.

I claim as my invention and desire to secure by Letters Patent—

10 A car-coupling comprising a draw-head of two sections divided horizontally and longitudinally, a groove in the meeting sides of each section, a plate secured to the upper section having a depending flange extending
15 into the recess formed by the sections, a pro-

PELLER-BLOCK located in the recess having a stem projecting through the depending flange, a spring encircling the stem and interposed between the flanges and the propeller-block, a vertical orifice in the draw-head, and a pin 20 housed in the orifice, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in the presence of two subscribing witnesses.

WILLIAM C. PERKINS.

Witnesses:

BRUCE PERKINS,
A. L. CLEVINGER.