

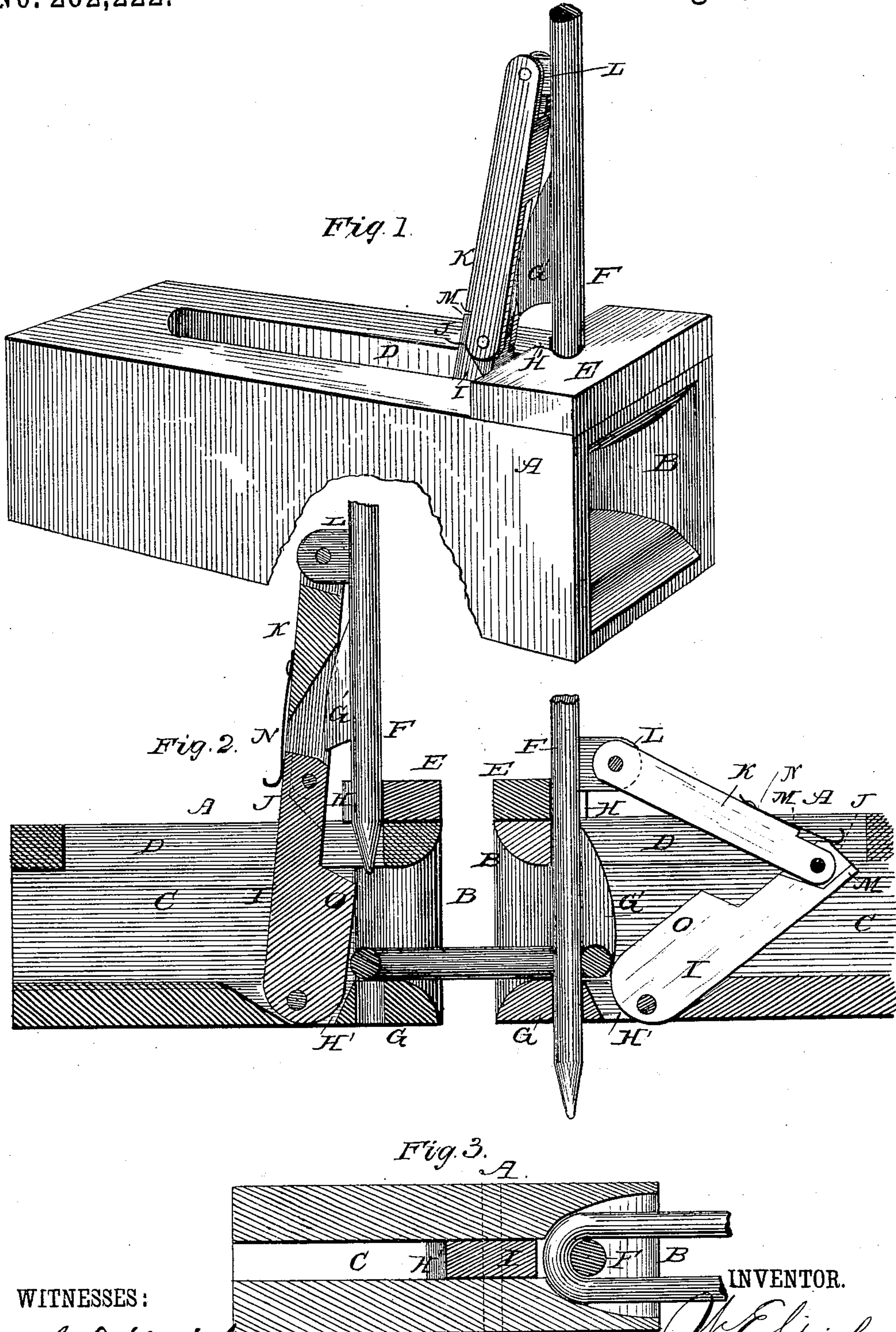
(No Model.)

W. E. GRISHAM.

CAR COUPLING.

No. 262,222.

Patented Aug. 8, 1882.



WITNESSES:

*Ad. L. Dieterich*  
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# UNITED STATES PATENT OFFICE.

WILLIAM E. GRISHAM, OF SELMA, ARKANSAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 262,222, dated August 8, 1882.

Application filed May 29, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, W. E. GRISHAM, of Selma, in the county of Drew and State of Arkansas, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my improved car-coupling. Fig. 2 is a longitudinal vertical sectional view, showing two adjoining draw-heads in position for coupling; and Fig. 3 is a horizontal sectional view.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to automatic car-couplings; and it consists in certain improvements in the construction of the same which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the draw-head, which is provided with the mouth or opening B to receive the coupling-link. The mouth or recess B, which is rounded or curved, as shown, gradually contracts to a narrow slot, C, at its inner or rear end. The upper side of the draw-head has a longitudinal slot, D, just above and communicating with the slot C, which forms part of the recess in the draw-head. At the front end of said slot D is formed a bearing, E, for the vertically-sliding coupling-pin F. An additional bearing, G, for said pin is formed in the bottom of the draw-head. The pin F has upon its rear side a vertical flange, G', which may slide in a narrow slot, H, connecting the slot D with the bearing E. The bottom of the draw-head is provided with a longitudinal slot, H', in which is hinged a lever, I, the upper end of which is recessed on both sides, as at J, to receive the lower forked end of a connecting-rod, K, hinged to said lever and to a lug or flange, L, upon the rear side of the coupling-pin near the upper end of the latter. The lever I and connecting-rod K have

shoulders M, which, when the parts are in a raised position for coupling, as in Fig. 1, bear against each other, thus supporting or retaining the parts in such position. To assist in attaining this result, I also employ a flat spring, N, secured upon the connecting rod K and bearing upon the rear side of lever I, as shown. Upon the front side of lever I is formed a bulge, O, which extends from the slot C into the mouth B of the draw-head when the lever is raised. Said bulge also serves to weight the lever, and thereby retain it in its proper position.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. The coupling-pin may be raised by hand or by suitably-arranged cords and pulleys or levers. In the act of raising the pin the lever and connecting-rod are also raised until they are in line with each other, thus supporting the pin in a raised position. The spring N serves to prevent the pin from dropping accidentally by the jostling of the cars. When the coupling-link enters the draw-head in which the pin is held raised it strikes the lever I, forcing it back and causing the connecting-rod and coupling-pin to drop and complete the coupling. The flange G' upon the rear side of the coupling-pin serves, by forcing the inner end of the link downward, to retain said link in a horizontal position for operating the draw-head of the next car.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a car-coupling, the draw-head having a vertically-sliding coupling-pin, a lever hinged in the bottom of said draw-head, and a hinged rod connecting the said lever and coupling-pin, substantially as set forth.

2. The draw-head A, having mouth or recess B, slot C, bearings E G, and slots D H', in combination with the coupling-pin F, having lug L and the lever I, and connecting-rod K, having shoulders M, all arranged substantially as set forth.

3. In a car-coupling, the combination, with

the vertically-sliding coupling-pin, of the lever I and connecting-rod K, having shoulders M and the flat spring N, as set forth.

4. The combination of the draw-head having recess B and slot C, the vertically-sliding coupling-pin, the lever I, having bulge O, and the connecting-rod K, as set forth.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM EDWIN GRISHAM.

Witnesses:

GEO. R. CLAYTON,

R. A. PICKENS.