

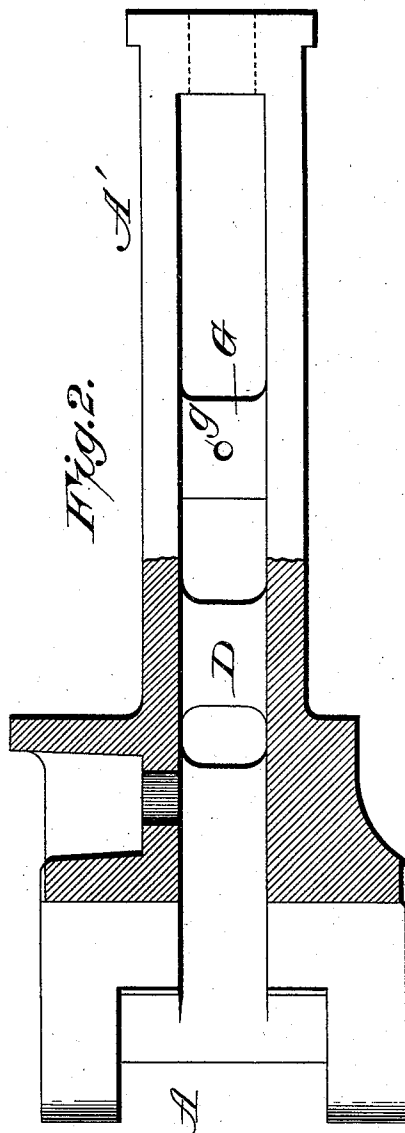
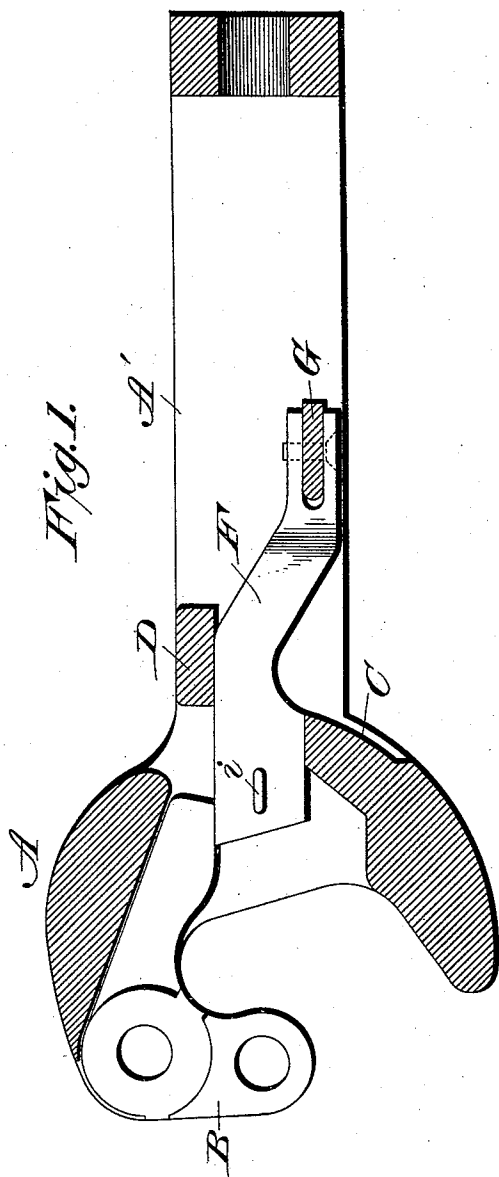
(No Model.)

2 Sheets—Sheet 1.

F. HARVEY & J. KANE.
CAR COUPLING.

No. 493,998.

Patented Mar. 21, 1893.



Frank Harvey
and
John Kane

Witnesses *L. S. Elliott.*
E. M. Johnson

Inventors:
by *[Signature]*
Attorney

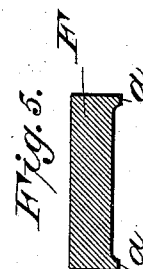
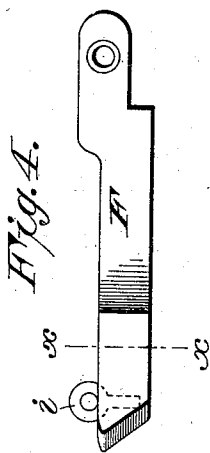
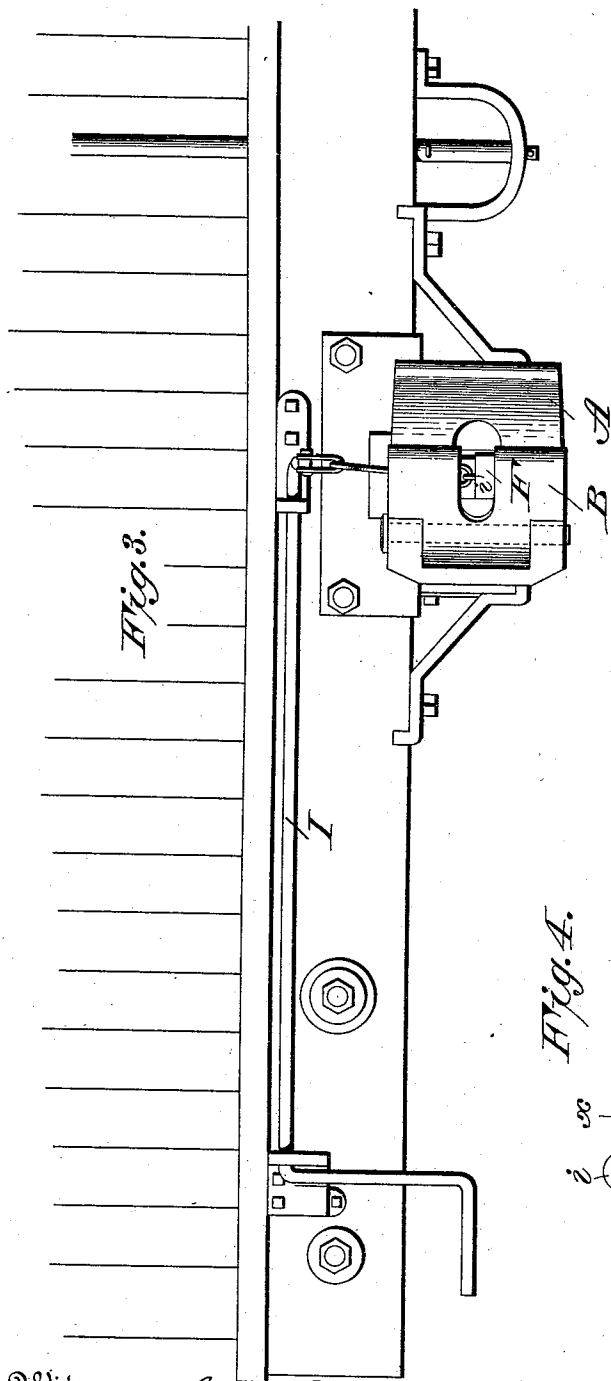
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2 Sheets—Sheet 2.

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Inventors:
by [Signature] Attorney

UNITED STATES PATENT OFFICE.

FRANK HARVEY AND JOHN KANE, OF RENOVO, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 493,998, dated March 21, 1893.

Application filed January 17, 1893. Serial No. 458,732. (No model.)

To all whom it may concern:

Be it known that we, FRANK HARVEY and JOHN KANE, citizens of the United States of America, residing at Renovo, in the county of Clinton and State of Pennsylvania, have invented certain new and useful Improvement in Car-Couplings; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car couplings; the same being designed, more especially, as an improvement upon our patent issued December 30, 1890, No. 443,916; and the present invention consists in the improved form of latch and drawhead, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a horizontal sectional view of a car-coupling constructed in accordance with our invention. Fig. 2 is a vertical section. Fig. 3 is a front elevation, showing the means employed for raising the latch. Fig. 4 is a side elevation of the latch detached. Fig. 5 is a sectional view through the line $x-x$.

The draw-head, A, at the end of the draw-bar A' has pivoted thereto the coupling-hook B, which is substantially as shown in our prior patent referred to. One side of the draw-head is continued toward the center, as shown at C, and against this projection bears the catch F. The opposite side of this catch bears against a web, D, formed between the two pieces which make up the draw-bar.

G designates a vertical web, which is formed between the members of the draw-bar rear of the web D and on the opposite side therefrom, and to this web is pivoted the latch, said latch being bifurcated to embrace the web. The latch is bent so as to locate its forward portion, which lies between the guides C and D, in the center of the draw-bar and on a line therewith. At the forward end of the latch is attached an

eye, i , which is connected by a link or connecting bar to a crank-shaft I, carried by the end of the car.

The draw-bar is connected to the car in any suitable manner, preferably by what is known to the trade as the "Graham patent rigging," and to apply our improvement to this rigging it is necessary to have a free space from the forward end, or open head, of the draw-bar to the rear end, into which the headed connecting bar can be passed, and by locating the web G to one side of the center the result is readily accomplished; moreover, the bearing of the latch can be more readily cleansed of obstructions which are liable to accumulate between the upper and lower pieces of the draw-bar; and further, by providing the guides C and D the latch is more thoroughly braced at its forward end.

The forward portion of the latch is channeled on its under side so that only the side edges rest upon the draw-bar.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination in a car-coupling, of a draw-bar carrying a latch the rear end of which is pivoted to a web located to one side of the center of the draw-bar, together with bearing walls C and D between which the latch moves, the forward end of the latch being adapted to engage with the coupling-hook, substantially as shown, and for the purpose set forth.

2. The combination in a car-coupling, of a draw-bar carrying within the same a vertically moving latch, the rear end of said latch being bifurcated to embrace a vertical web G, to which it is pivoted, together with guide C and D provided with straight walls against which the forward portion of the latch bears, the center portion of the latch being bent to locate the ends out of line, substantially as shown, and for the purpose set forth.

3. In a twin jaw car coupling, a draw-head having one side extended inward to form a guide for the latch, webs D and G located on opposite sides of the draw-bar, a pivoted

coupling hook B adapted to be engaged by
the forward end of the latch, the forward
portion of the latch lying between the guides
or bearings D and C and the rear portion
5 being bent so as to be pivoted to the web G,
substantially as shown and for the purpose
set forth.

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

FRANK HARVEY.
JOHN KANE.

Witnesses:

J. F. HARVEY,
HORACE L. BEALL.