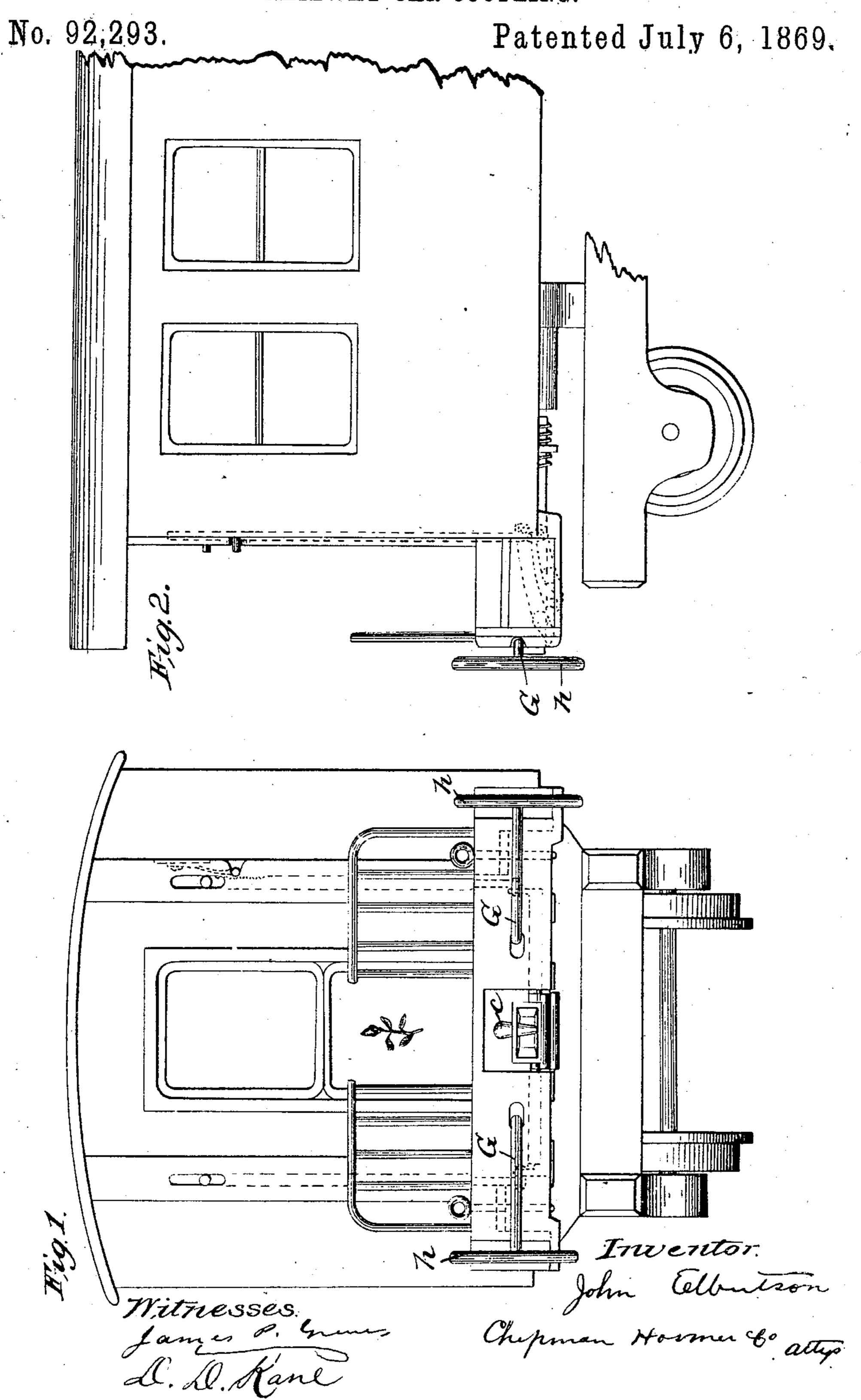
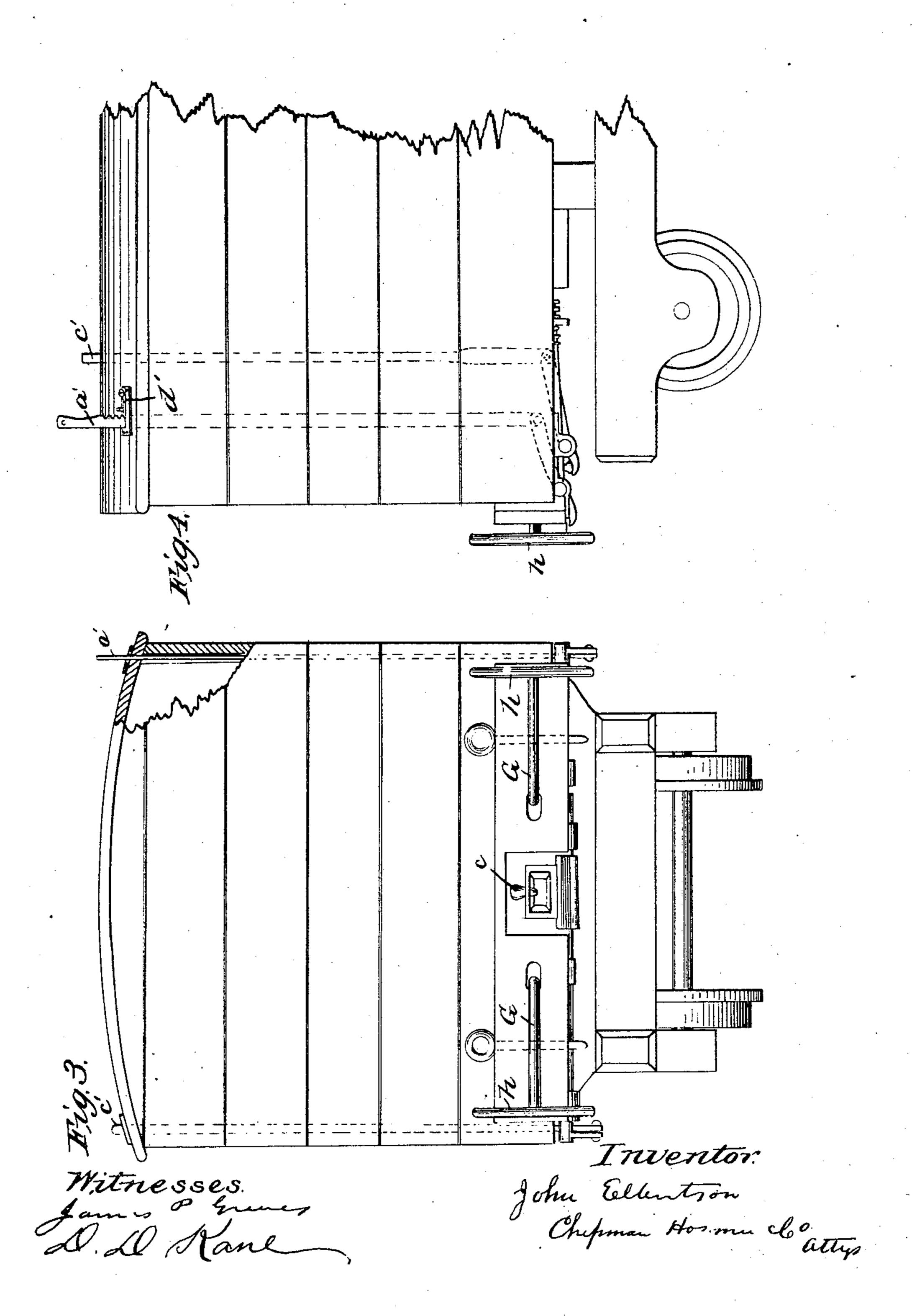
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No. 92,293.

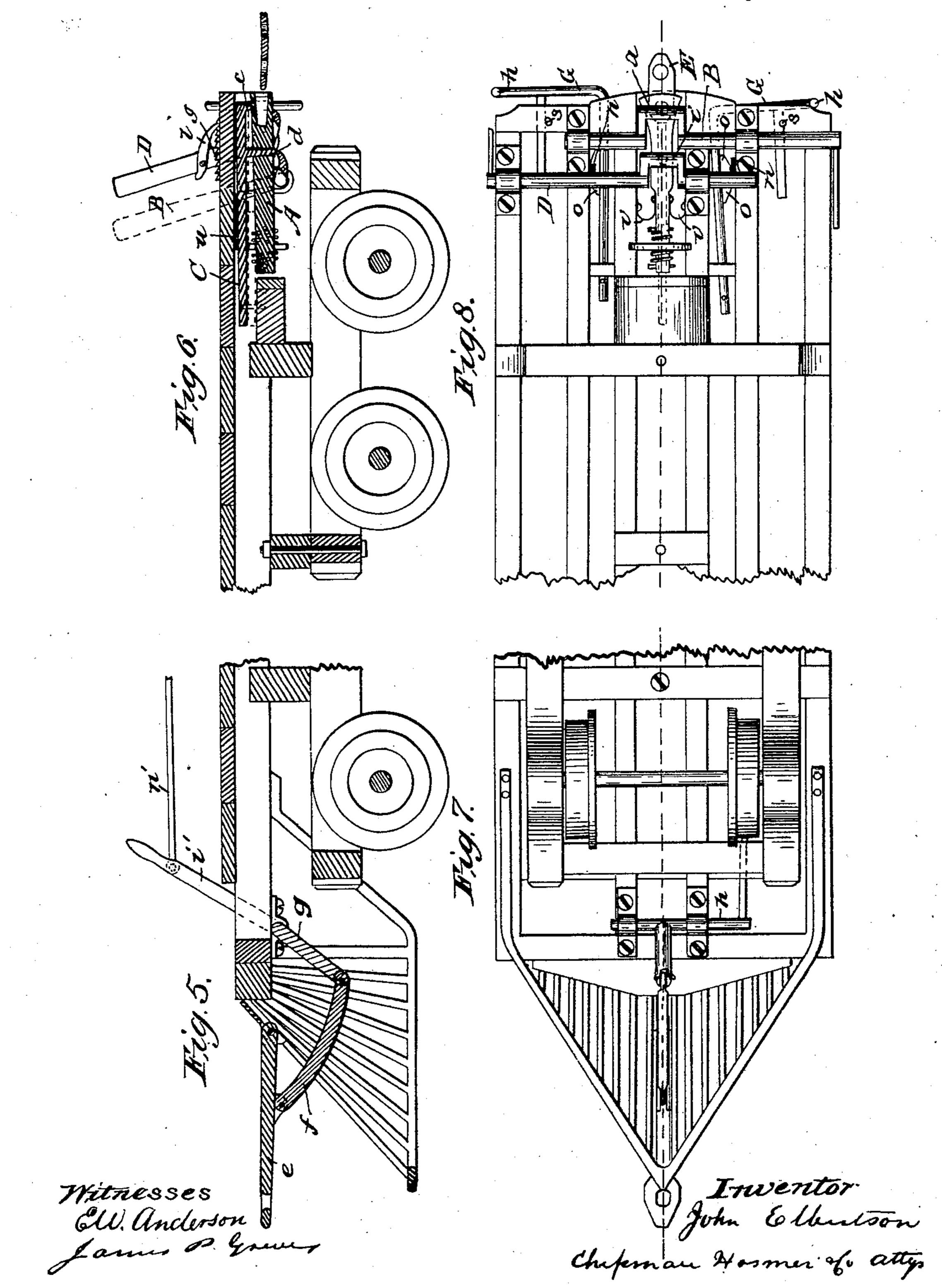
Patented July 6, 1869.



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No. 92,293.

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JOHN ELBERTSON, OF KIRKSVILLE, MISSOURI.

Letters Patent No. 92,293, dated July 6, 1869.

IMPROVED RAILWAY-CAR COUPLING.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, John Elbertson, of Kirks-ville, in the county of Adair, and State of Missouri, have invented a new and valuable Improvement in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a view of the end of a railway passenger-car with my coupling attached.

Figure 2 is a side view of a portion of a passenger-car with my coupling attached.

Figure 3 is a view of the end of a freight-car with my coupling attached.

Figure 4 is a side view of a portion of a freight-car with my coupling attached.

Figure 5 is a longitudinal sectional view of a locomotive carriage with my coupling-device therefor.

Figure 6 is a longitudinal section of a passenger-car with my coupling attached.

Figure 7 is a plan view of fig. 5 as shown from the

bottom.

Figure 8 is a bottom plan view of my coupling.

My invention relates to means for connecting and disconnecting railway-cars; and

It consists, mainly, in the construction and arrangement of certain improvements to my device, patented November 10, 1868, intended to increase the usefulness and efficiency thereof.

The letter A, of the drawings, represents the bumper of a car, and

The letter B, an elbow-lever, having a lip or offset, a, that works against the bottom of said bumper, to raise or lower the same at will.

The letter C represents a rod or bar, arranged iminediately above the bumper, as shown. It has a hook, c, at its front end, that works inside the bumper, to hold the link, hereinafter mentioned; and it has also a pin, d, that works up and down through said bumper, to release said link from the hook a, as also hereinafter mentioned.

The letter D is an elbow-lever, with a lip or offset, i, by means of which the pin d, above mentioned, is actuated.

The letter E represents a link, that serves as the immediate means of connection between the cars, by being hooked to the hook a, on the end of bar C.

The letters n represent pins, respectively, attached to the lever D, as shown, and which serve as a part of the means of uncoupling the cars, as stated hereafter.

The letters G are sliding bars, constructed in the form shown, having, respectively, cross-heads h and slotted lips o, which lips work in conjunction with the pins n, above described.

For the purpose of preventing said sliding hars from

working, when desirable so to prevent them, I make notches or openings in bars G, at the points s, and insert pins therein.

Said pins are passed through the frame of the platform, and through the notches or openings in said bar, and are removable at will.

The letter u represents a spring, arranged immediately above the bar C, and which serves as a means for pressing the same downward, and keeping it in place.

It will readily be seen, that by the devices above described, the cars may be uncoupled by actuating the lever D, or either of the sliding bars G.

The lever B serves as an aid in the process of coup-

Whenever it is found desirable, as when, for instance, there is danger of the cars being thrown from the track, I place the sliding bars G in gear, by removing the pins by which they are held at the points, and placing the same on the opposite side of the bars. The result is, that if the cars are thrown from the track, either to the right or left, any two of the bars G, by contact, will press the lever D backward, and thereby release the link from the hook to which it is connected.

Whether the bars G are in or out of gear, uncoupling may be effected by means of the lever D.

The letters v represent springs, attached, respectively, to the sides of the bumper, to aid in keeping the same in place.

I usually make that part of the platform immediately above the bumper, round and full, as shown on fig. 8, to serve as a shield in preventing the bars G from contact, except in cases when the cars assume an angular position to each other, as is usual when they are thrown from the track.

The letter y represents a ratchet-plate, arranged upon the platform of the car, and

The letter *l*, a dog, arranged upon lever B, operating with said ratchet-plate, to hold said lever, and, thereby the bumper, in the position desired.

The above-described devices are attached to each

end of all the cars of a passenger-train.

Upon each end of freight-cars, I arrange the same devices, except that I depress the handles of levers B and D, as shown on fig. 4, and attach to the ends thereof, respectively, vertical rods, marked a and c, which extend above the top of the car.

The rod a' is attached to the lever B, and the rod c to lever D.

The rod a' has a ratchet-head, operating in conjunction with a dog, d', as shown, to aid in adjusting the bumper.

The cars may be uncoupled by pressing downward upon the top of rod c.

For coupling the locomotive to a car, I construct the devices shown on figs. 5 and 7, in which the letter e represents the expling-bar, hinged to the cowcatcher, and letter f, a curved arm, pivoted to bar θ at its front end, and to arm g at its rear, as shown.

The letter h' represents a shaft, arranged in suitable bearings upon the bottom of the locomotive-frame, and having an arm, g, extending downward, to which the arm f is pivoted.

The letter i' is an arm, attached to the end of shaft

h, as shown, and

The letter n' is a rod or cord, attached to the upper end thereof, extending rearward to any desirable distance.

The devices last mentioned enable the operator, either upon the platform, in the rear of the cowcatcher, or in the lookout, or elsewhere on the locomotive-carriage, to adjust the coupling-bar e to the hook of a bar, C, at will.

What I claim as my invention, and desire to secure

by Letters Patent, is-

1. The bar C, with its pin d and hook c, as described, when constructed and arranged to operate substantially as and for the purposes specified.

2. The sliding bars G, with their lips and pins, as described, in combination with the lever D, and its pins, when the same are constructed and arranged to

operate substantially as set forth.

3. In combination with the levers B and D, the vertical rods a' and c' and the dog d, when the same are constructed and arranged to operate substantially as and for the purposes described.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two wit-

nesses.

JOHN ELBERTSON.

Witnesses:

JAMES P. GREVES, DENNIS D. KANE.