

(No Model.)

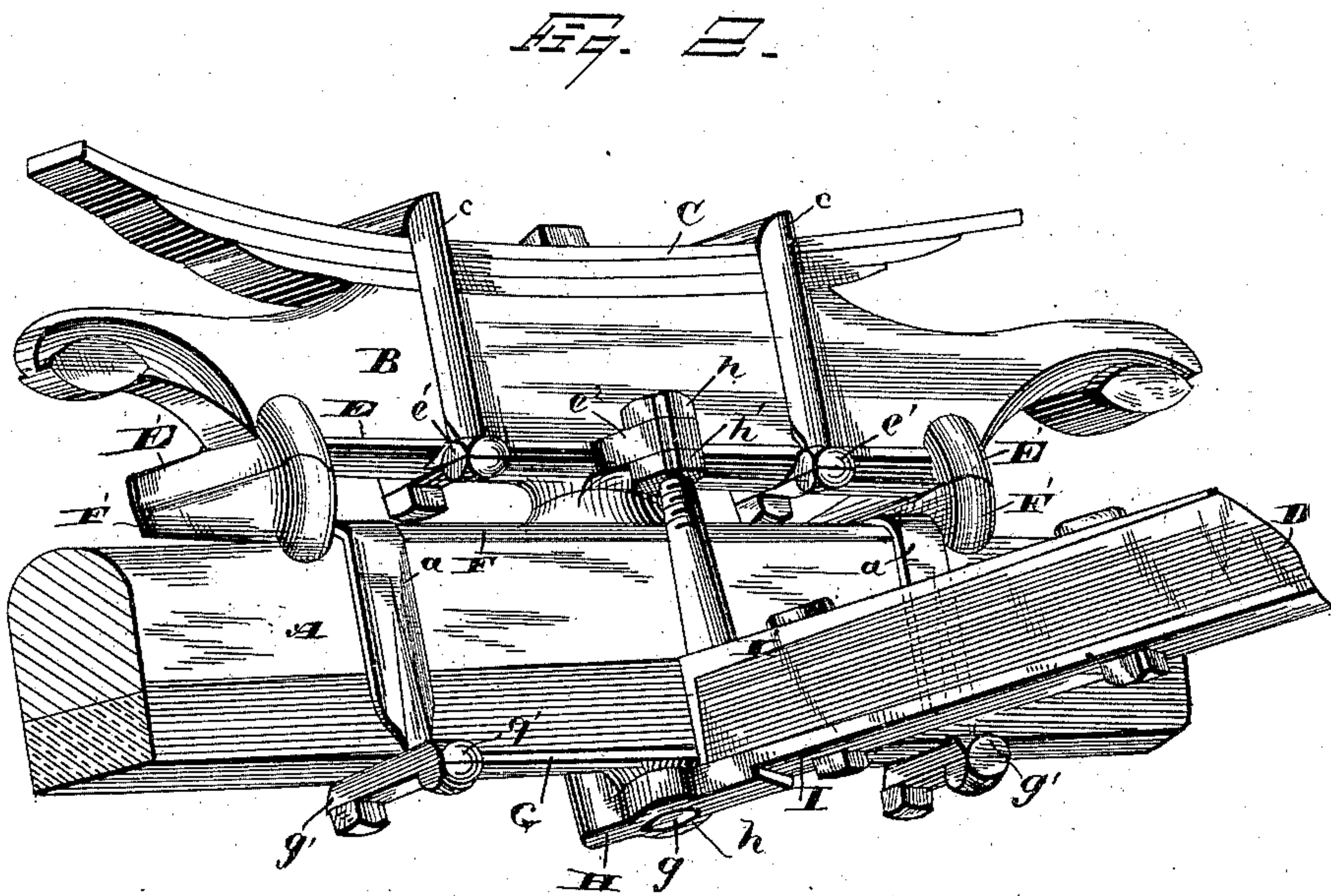
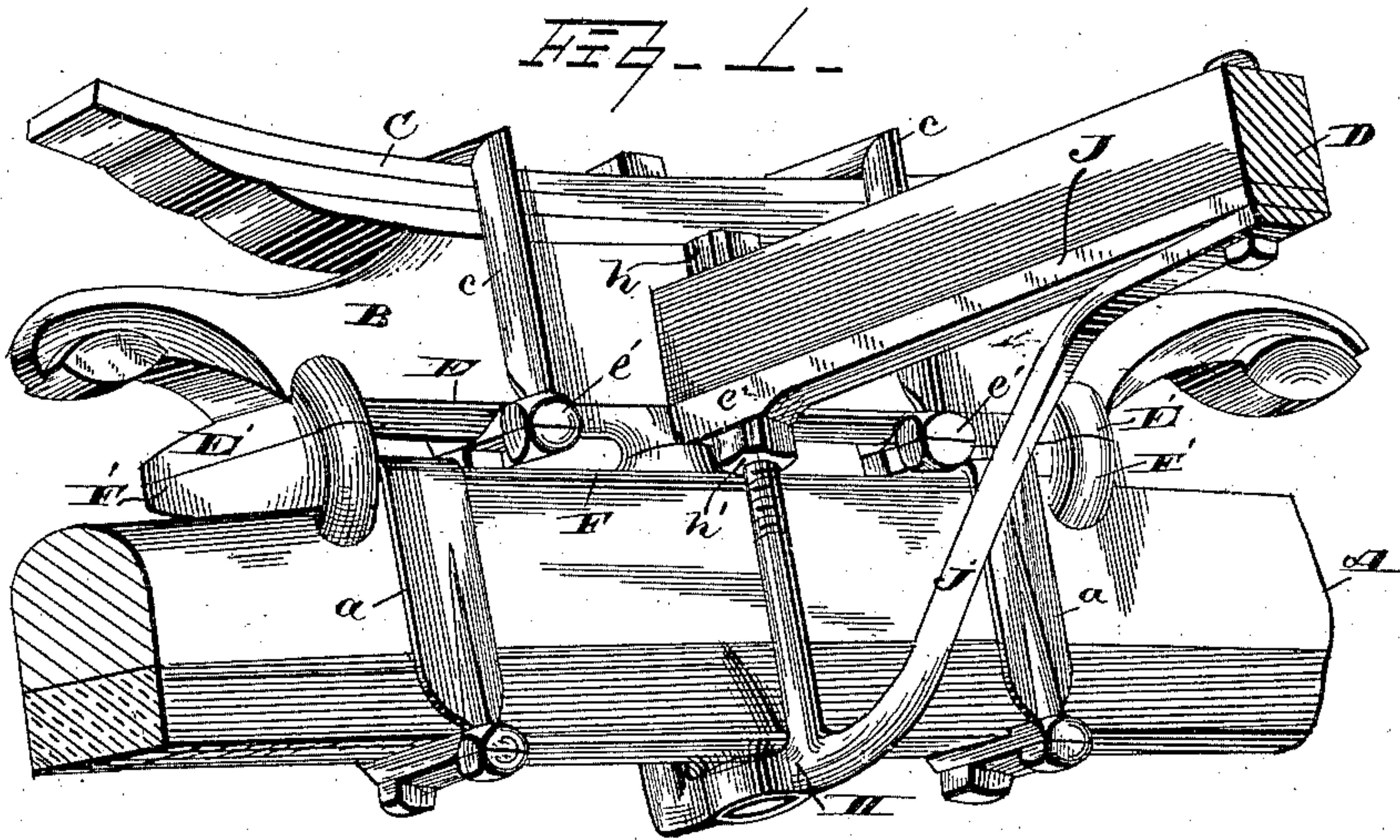
2 Sheets—Sheet 1.

G. W. SIMMONS.

RUNNING GEAR FOR CARRIAGES.

No. 335,969.

Patented Feb. 9, 1886.



WITNESSES

Wm. M. Monroe
Geo. W. King

INVENTOR

George W. Simmons
by Russell and Luzzetta
Attorneys

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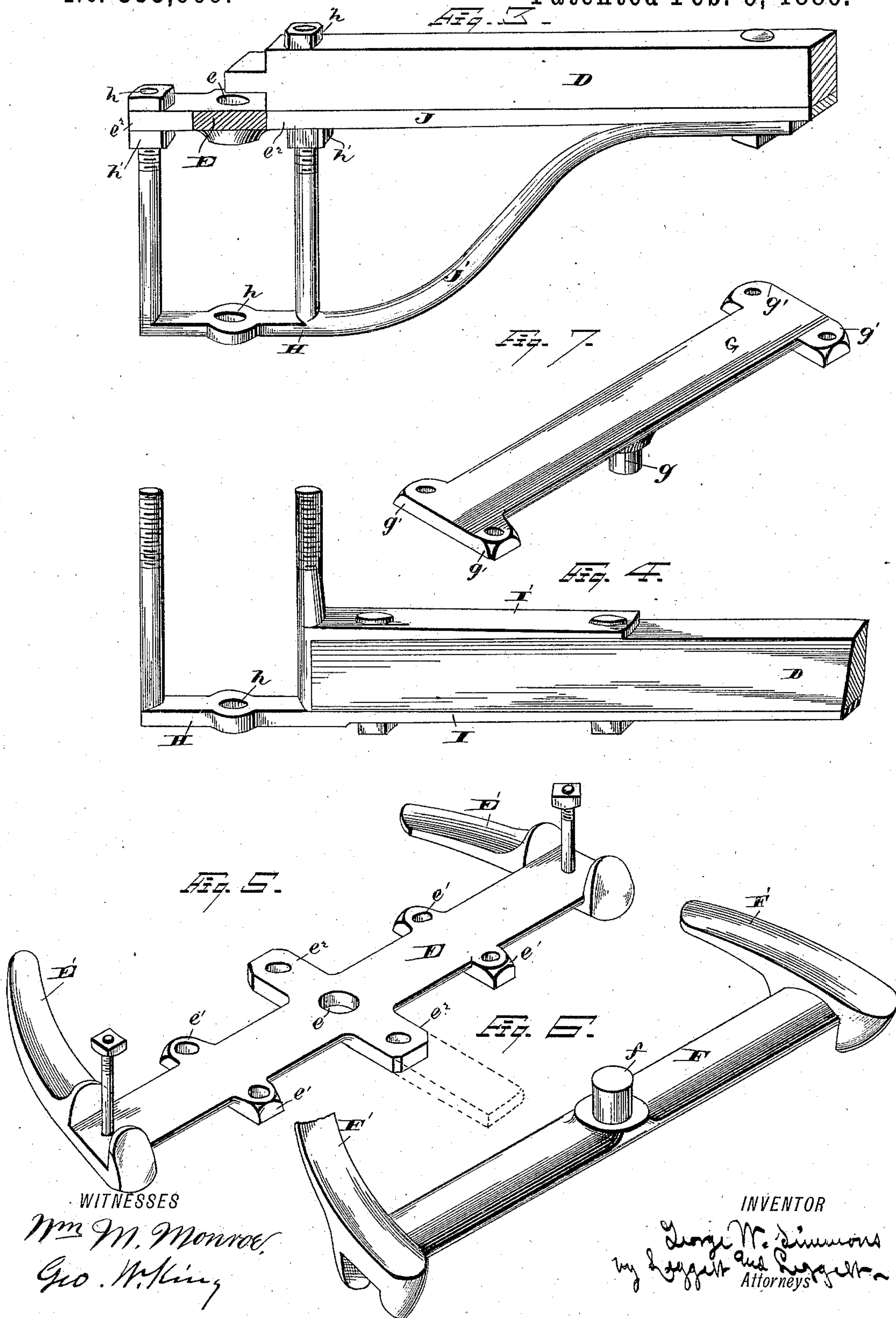
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by L. J. Lippert and L. J. Lippert
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. SIMMONS, OF YOUNGSTOWN, OHIO, ASSIGNOR OF ONE-HALF
TO EDWARD F. THOMAS, OF SAME PLACE.

RUNNING-GEAR FOR CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 335,969, dated February 9, 1886.

Application filed October 17, 1885. Serial No. 180,119. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. SIMMONS, of Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Running-Gears for Carriages; and I do hereby 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 the same.

My invention relates to improvements in running-gears for carriages; and it consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figures 1 and 2 are views in perspective of portions of the running-gear embodying my invention, the one showing the reach attached to the head-block and the other showing the reach depressed so as to be about flush on the under side with the bottom of the axle. Figs. 3 and 4 are enlarged views in perspective, showing the modifications of the yoke and attachments necessary in attaching the reach to the head-block and in depressing the reach. Figs. 5, 6, and 7 are enlarged views in perspective, respectively, of the plates E, F, and G.

A represents the axle, B the head-block, C a portion of the spring, and D the reach.

E is a plate that is secured to the under side of the head-block and rests on the plate F, the latter being secured on top of the axle. These plates at their center are made male and female, the one having a lug, *f*, that fits in a hole, *e*, of the other plate; but it is a matter of no consequence which plate has the lug attached and which has the hole. The plate E has ears *e'*, for attaching the clips *c* that secure the spring, and ears *e''* that receive the bolt ends of the yoke H. The rear lug *e''* may extend rearward under the reach, as shown in Figs. 1 and 3, and in dotted lines Fig. 5, in case the reach is attached to the head-block as shown in Figs. 1 and 3.

The plates E and F have respectively corresponding laterally-projecting segmental

arms E' and F', that perform the functions of a fifth-wheel.

The plate G has a depending lug, *g*, that fits in the hole *h* of the yoke H. The plate has also ears *g'*, that receive the ends of the clips *a*, that secure the plates to the axle.

The plates E, F, and G are usually of forged steel. In case the reach is depressed straps I and I' are forged integral with the yoke and in position to embrace the reach. (See Figs. 2 and 4.)

If the reach is connected with the head-block, the rear ear *e''* is made long enough to weld to it the strap J, that extends under the reach, in which case a brace, J', is forged integral with the yoke and secured to the reach. (See Figs. 1 and 3.)

In assembling the parts the lugs or trunnions *f* and *g* are arranged in line, and for this purpose it is more convenient to have the two trunnions on the plates that are secured to the axle. The yoke secures the parts, while leaving the axle free to turn on the trunnions. The yoke is provided with nuts *h* and *h'*, respectively, above and below the ears *e''*, by means of which the plates E and F are adjusted to turn easily on each other, but without lost motion in the parts. The wear of these plates may be taken up from time to time by readjusting the said nuts of the yoke.

It will be observed that in place of a hole through the axle or head-block, or both, for a king-bolt, that would of course weaken the parts, these parts are strengthened by the addition, respectively, of the plate E and of the plates F and G; also, as the yoke spans the axle, and the legs thereof engaging the ears *e''* at some little distance from the axis of the trunnions, as shown, the device is much stiffer and better adapted to hold the axle than would be done by a single bolt.

What I claim is—

In running-gears for carriages, the combination, with plates made male and female at the center of each, said plates being attached, respectively, to the head-block and axle, so as to engage each other and perform

the functions of a fifth-wheel, a plate attached to the bottom of the axle, said plate having a depending lug or trunnion in line with the axis of the aforesaid plates above,
5 in combination with a yoke consisting, essentially, of a horizontal section and two vertical sections formed integral, substantially as shown, said yoke being attached to the reach and to laterally-projecting ears of the said

plates of the head-block, the parts being arranged substantially as described.

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

GEORGE W. SIMMONS.

Witnesses:

GEO. E. ROSE,
JAMES M. MCKAY.