

(No Model.)

J. F. FALLON.
GEAR IRON FOR CARRIAGES.

No. 373,227.

Patented Nov. 15, 1887.

Fig. 3.

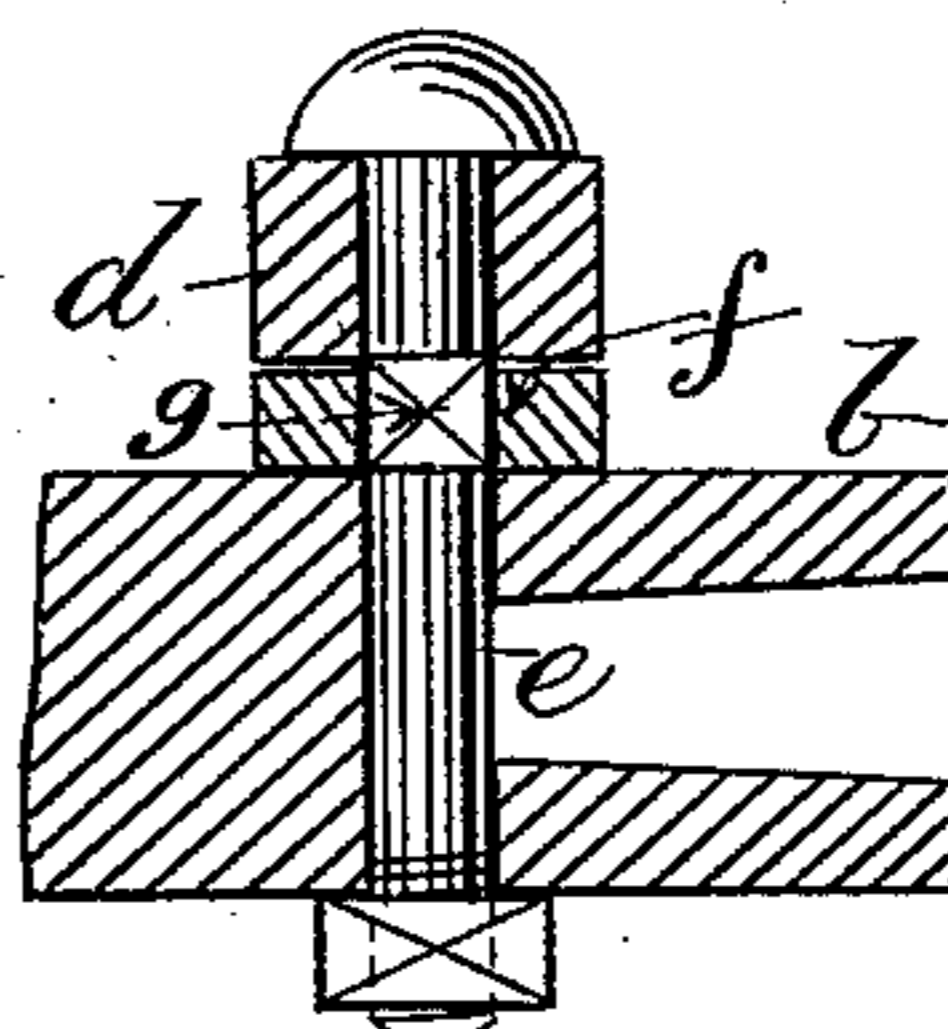


Fig. 1.

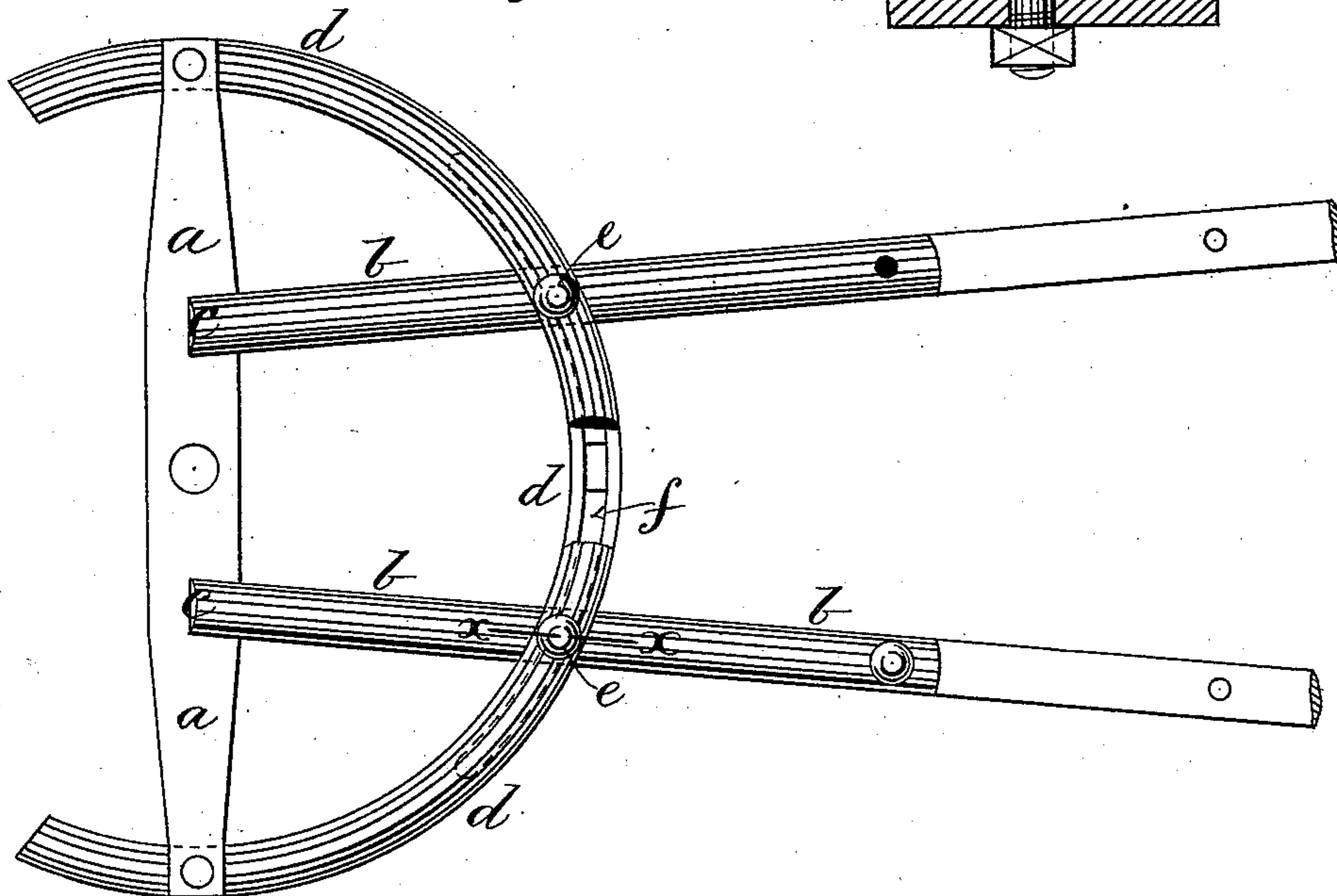
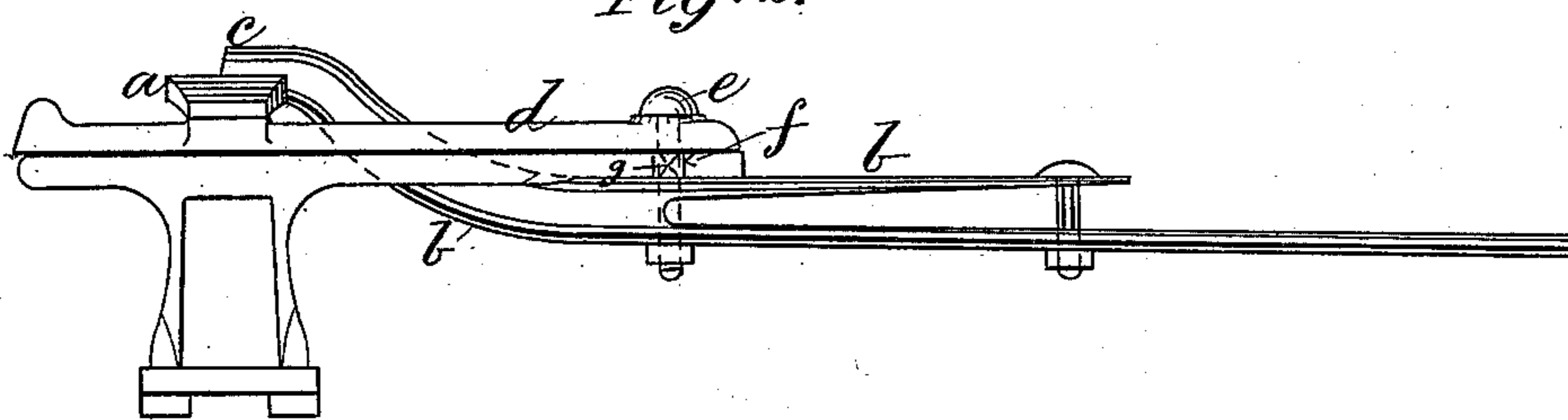


Fig. 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

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GEAR-IRON FOR CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 373,227, dated November 15, 1887.

Application filed February 18, 1887. Serial No. 228,034. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. FALLON, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in the Gear-Irons of Carriages and other Vehicles, of which the following is a full, clear, and exact description.

My invention relates to improvements in the construction and arrangement of the fifth-wheel, head-block plate, and drop-perch sockets of carriages and other vehicles, and has for its object to enable the body of the vehicle to be brought down and to obtain greater strength and less liability to breakage than with the ordinary irons.

It consists, as applied particularly to double drop-perch sockets, in swelling or enlarging the ends of these sockets where welded or stamped onto the head-block plate, in lieu of being flush therewith, as at present, and in securing each drop-perch socket to the fifth-wheel by a specially-shaped safety or king bolt, which passes through the arc slot of the fifth-wheel without interfering with the free movement of the latter, and so allowing of the use of a full curved fifth-wheel, instead of segments, as in many cases.

On the accompanying drawings, Figure 1 is a plan, partly broken away, of the carriage-gear to which my invention relates; Fig. 2, a side elevation thereof, and Fig. 3 a section to full size through line *xx* in Fig. 1.

Like letters of reference denote like parts in all the figures.

a represents the head-block plate, and *b b* the double drop-perch sockets, the ends of which, where they are welded or stamped onto the rear edge of the head-block plate *a*, are formed with a swell or enlargement, *c*, passing part way across the upper side of the head-block *a*, instead of the ends being joined directly to the edge and flush with the top side of the head-block plate *a*, as at present. This swell or enlargement *c* adds greatly to the strength of the junction of the drop-perch sockets with the head-block plate *a*, and prevents any sudden fracture thereat, which

is an important desideratum in the case of accident to the vehicle.

From the head-block plate *a* the double drop perch sockets *b* pass (one on each side of the center of the body) under the fifth-wheel gear *d*, to which each socket *b* is secured by a safety or king bolt, *e*, which passes through the fifth-wheel *d*, arc slot *f*, and perch-socket *b*, beneath which it is tightened up by a nut, as shown. This bolt *e*, where it passes through the arc slot *f* of the fifth-wheel, is formed with a square or rectangular portion, *g*, presenting a shoulder to the top of the perch-socket *b*, between which shoulder and the under side of the perch-socket *b* the bolt *e* is tightened up, sufficient play being allowed between the shoulder and head of the bolt *e* and at the sides of the square portion *g* of the bolt *e* for the radial motion of the fifth-wheel. By this means I dispense with all fifth-wheel stays or king bolt yokes as at present used, and obtain a double fastening and support for the drop-perch sockets *b*, combined with greater steadiness for the body of the vehicle than the ordinary double perch-plates.

My invention is also applicable to a single drop-perch socket.

I am aware that drop-perches have been heretofore connected with the head-block plate, and with the upper circle plate of the fifth-wheel, by bolts which passed through a curved slot in the lower circle-plate of the fifth-wheel, and do not herein broadly claim the same; but

What I claim as my invention is—

1. In gear-irons for vehicles, the combination of a head-block plate and a drop-perch iron having a swell or enlargement, *c*, extending partially across the head-block plate at the junction of the parts, substantially as and for the purposes specified.

2. In gear-irons for vehicles, the combination of a drop-perch, a fifth-wheel having a slotted circle-plate, and a king-bolt having a shoulder to bear on the drop-perch, substantially as and for the purposes specified.

3. In gear-irons for vehicles, the combina-

tion of a head-block plate, a drop-perch having a swell, *c*, where united to head-block plate, an upper circle-plate, a lower circle-plate having an arc slot, and a king-bolt for
5 connecting the upper circle-plate and the perch, said bolt having a rectangular portion, *g*, or shoulder, where it passes through the slot of the lower circle-plate, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 23d day of December, 1886.

JOHN F. FALLON.

Witnesses:

S. L. SCHRADER,
EDWIN SAUTER.