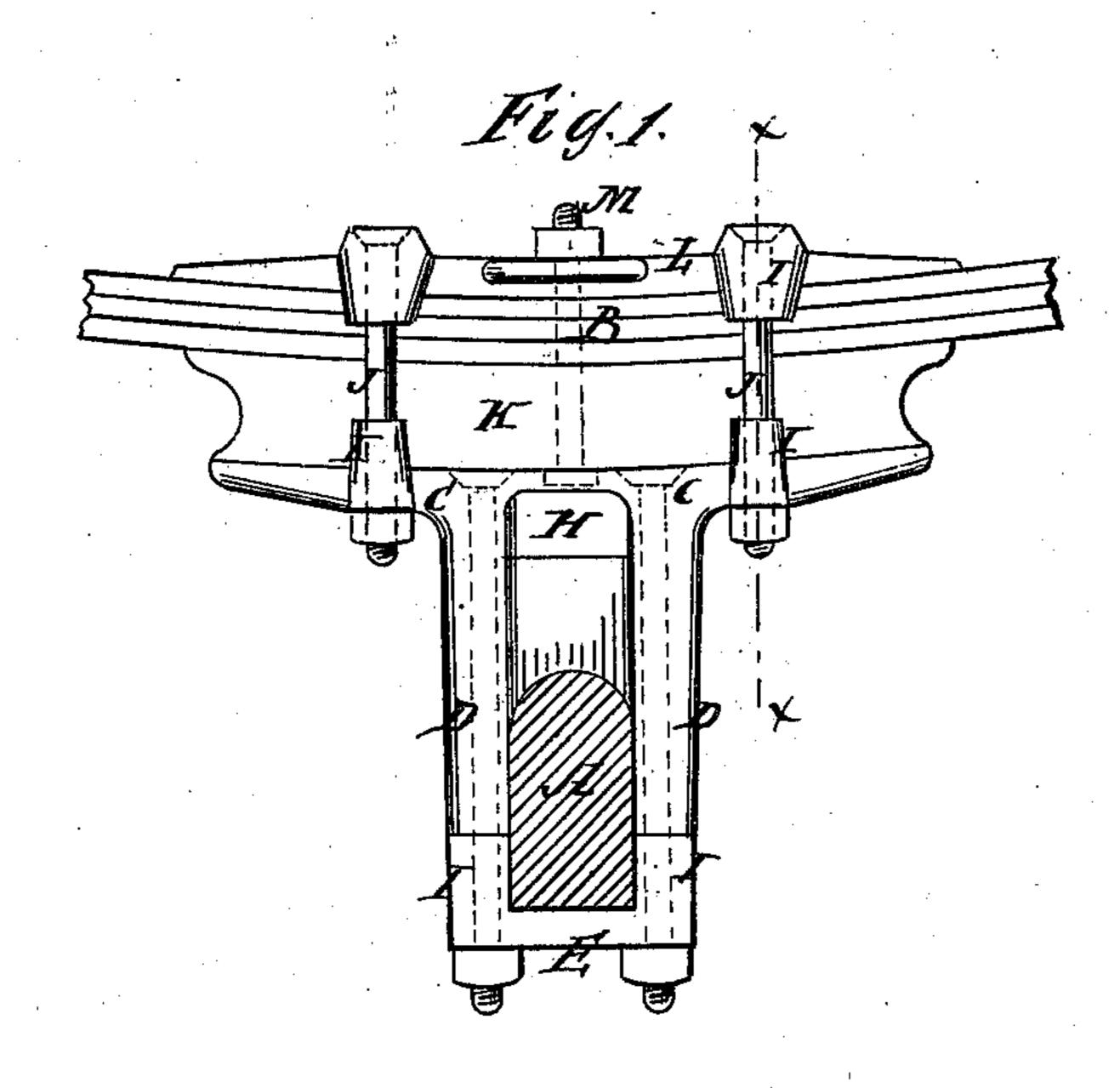
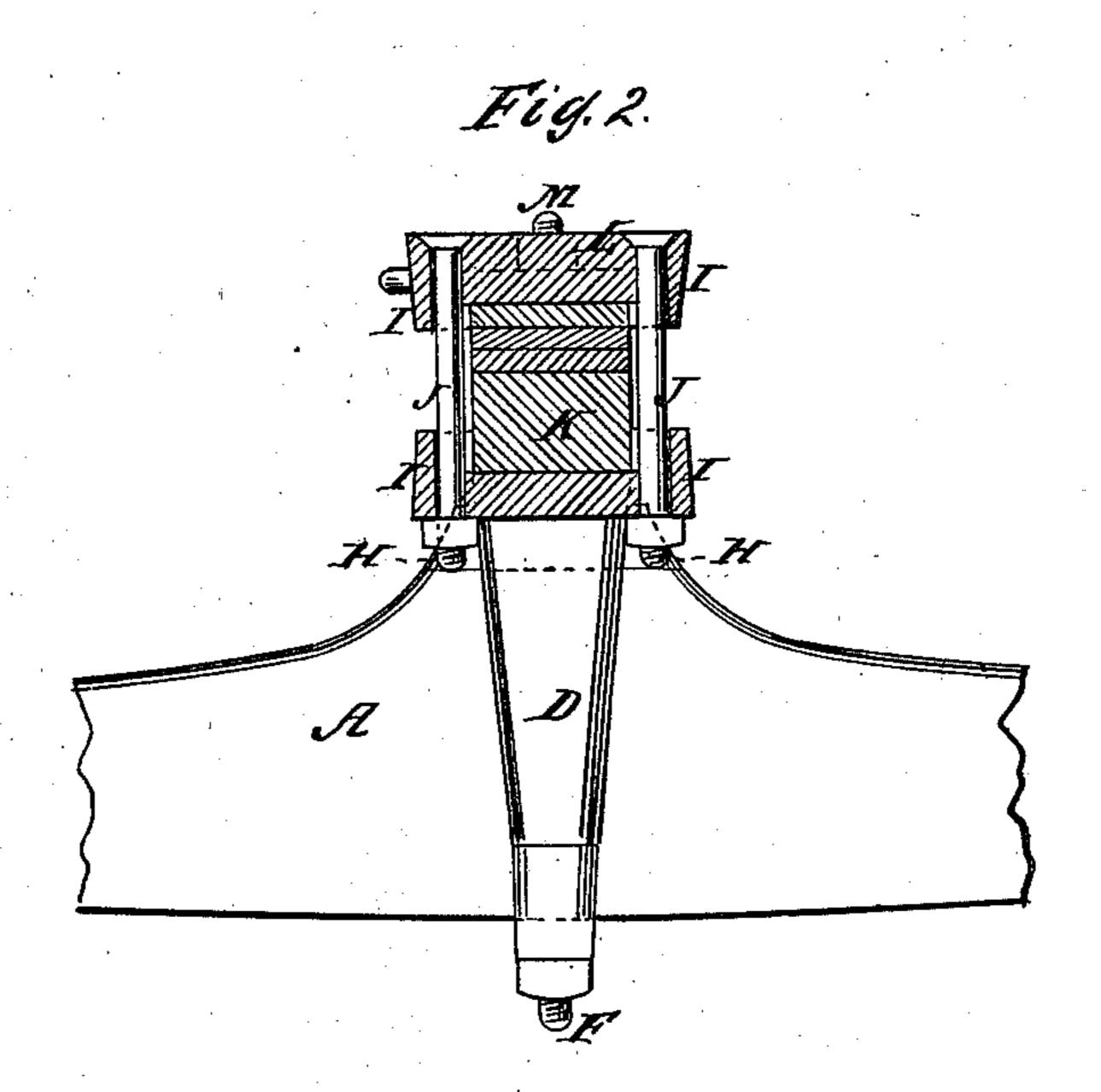
## F. MILLER.

## SPRING FASTENER FOR CARRIAGES

No. 174,428.

Patented March 7, 1876.





MILLEGOES

INVENTOR:
AMiller

A TTORNEYS

## UNITED STATES PATENT OFFICE.

FRANKLIN MILLER, OF INDIANOLA, ILLINOIS.

## IMPROVEMENT IN SPRING-FASTENERS FOR CARRIAGES.

Specification forming part of Letters Patent No. 174,428, dated March 7, 1876; application filed

- January 3, 1876.

To all whom it may concern:

Be it known that I, Franklin Miller, of Indianola, Vermillion county, Illinois, have invented a new and Improved Spring-Fastening for Carriages, of which the following is a specification:

My invention consists of a seat block or plate and a cap-plate of peculiar construction, for mounting and securing the springs of carriages on the axles.

Figure 1 is a transverse section of the axle and side elevation of my improved carriage-spring fastening, and Fig. 2 is a section of Fig. 1 on the line x x.

Similar letters of reference indicate corre-

sponding parts.

A represents the axle, to which the spring B is to be connected, and for which I provide the seat-plate C, preferably of malleable iron, the said plate being curved on the top to suit the curvature of the spring, and extended lengthwise of the spring as far as needed, for a substantial seat for it. From the under side two arms, D, of a yoke or clip, extend down the sides of the axle nearly to the bottom, and have the cap E for the under side of the axle bolted to them by the long bolts F extending down through them from the top of plate C. At each side of the plate C is a lateral projection, H, for widening the bearing of the plate on the axle, and on each side of the plate are bolt-hole projections I, which receive the fastening-bolts J, and, by extending above

the face of the seat-plate, they prevent the spring or the block of wood K, or other material sometimes used between the seat-plates and the spring, from working off the seat laterally. L is the cap-plate for fastening the spring on the seat-plate by the the bolts J, for which it also has hole-projections I, which, like those of plate C, extend beyond the face to prevent lateral displacement of the spring. M is a bolt extending down through the capplate, spring, and wooden block, into the seatplate, to prevent lengthwise movement of the spring. This bolt may extend down through the seat plate, if desired, and it may be contrived in the form of a dowel-pin, projecting upward from the face of the seat-plate. The plate E has also bolt-hole projections I, to extend along the sides of the axle to prevent lateral movement of the cap.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the cap-plate L, having bolt-hole projections I, with the plate C, having similar bolt-hole projections, the said projections of both plates being extended beyond the faces, to prevent lateral movement of the springs, substantially as specified.

FRANKLIN MILLER.

Witnesses:
GEO. McClure,
JOHN F. HOGAN.