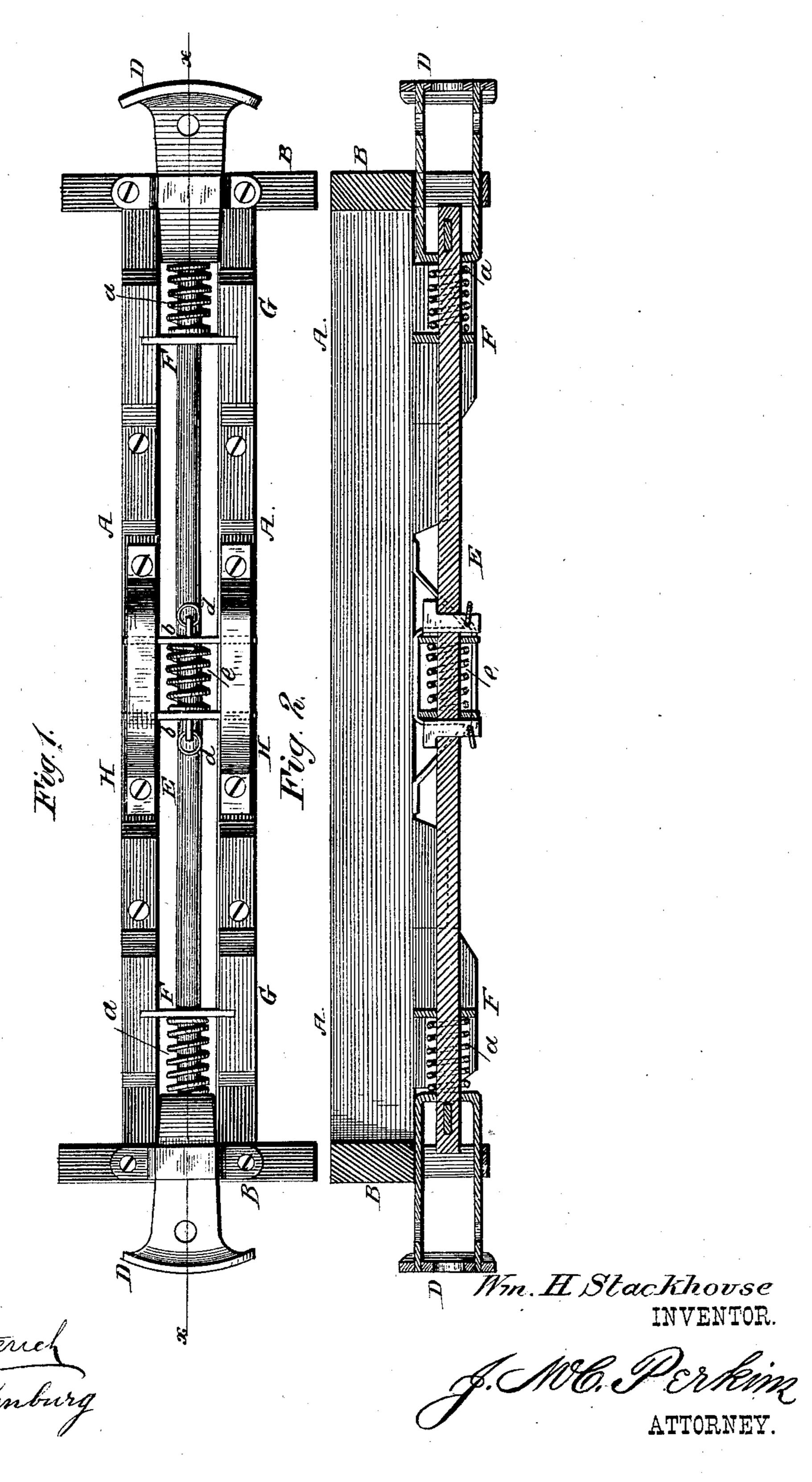
(No Model.)

W. H. STACKHOUSE. Drawbar for Railway Cars.

No. 232,152.

Patented Sept. 14, 1880.



United States Patent Office.

WILLIAM H. STACKHOUSE, OF BERWICK, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD OF HIS RIGHT TO RICHARD W. OSWALD, OF SAME PLACE.

DRAW-BAR FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 232,152, dated September 14, 1880.

Application filed July 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. STACK-HOUSE, of Berwick, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Draw-Bars for Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The same letters and figures of reference are used to indicate the corresponding parts.

After describing the invention, its nature and extent will be shown in the claims.

The object of my invention is to provide a continuous draw-bar with a single central spring, which shall divide the tensile strain between the central and the more distant springs.

Figure 1 is an inverted plan view of my in-25 vention. Fig. 2 is a vertical sectional view taken through the line x x of Fig. 1.

A A are two center stringers of the car-bed. B B are the end sills, to which the center stringers are attached. D D are the draw-so heads. E is the continuous draw-bar, to either end of which is attached the draw-head D. G G are the draw-head planks, which are attached to the under side of the stringers A A. F F are rigid plates firmly fastened in the draw-head planks. Between these plates and the draw-heads are placed the springs a a, which are coiled around the draw-bar E, and are thus held in position.

b b are two movable follower-plates in the

center of the draw-bar. Between these two 40 plates is the helical spring c, coiled around the draw-bar. The plates b b are kept in position by the keys d d, which pass through the draw-bar E.

 $\bf H$ $\bf H$ are keepers, within which the followers 45 b b move backward or forward.

It is evident that the tensile strain on either draw-head will be divided between the central spring and the spring at the opposite end of the draw-bar.

I am aware that two draw-bars, with a spring at either end of each, have been used in connection with a rectangular frame-work in the central part of the car-bed.

My invention is both simpler and cheaper, 55 and therefore more desirable and useful, than a draw-bar made in this manner.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a draw-bar for railway-cars, the central helical spring, c, surrounding the draw-bar, the followers b b, the keys d d, and the keepers H H, substantially as shown and described, and for the purposes herein set forth.

2. The central spring, c, the followers b b, and the draw-bar E, in combination with the springs a a and the draw-heads D D, substantially as shown and described, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of July, 1880.

WILLIAM H. STACKHOUSE.

Witnesses:

J. McC. Perkins,

C. HOYBERGER.