W. J. LACKIE.

Fifth-Wheel for Vehicles.

No. 221,831. Patented Nov. 18, 1879.

Fig. 1.

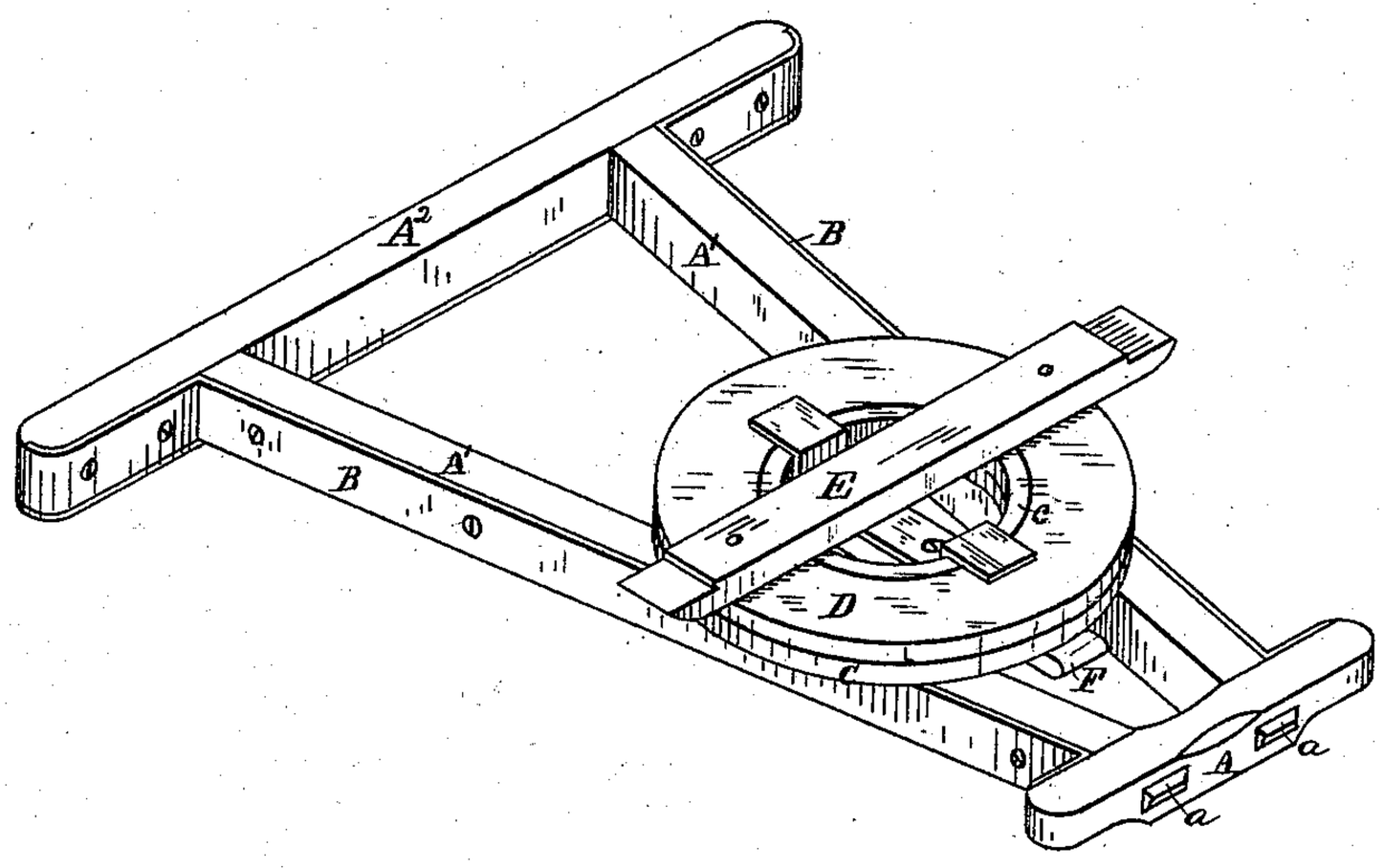
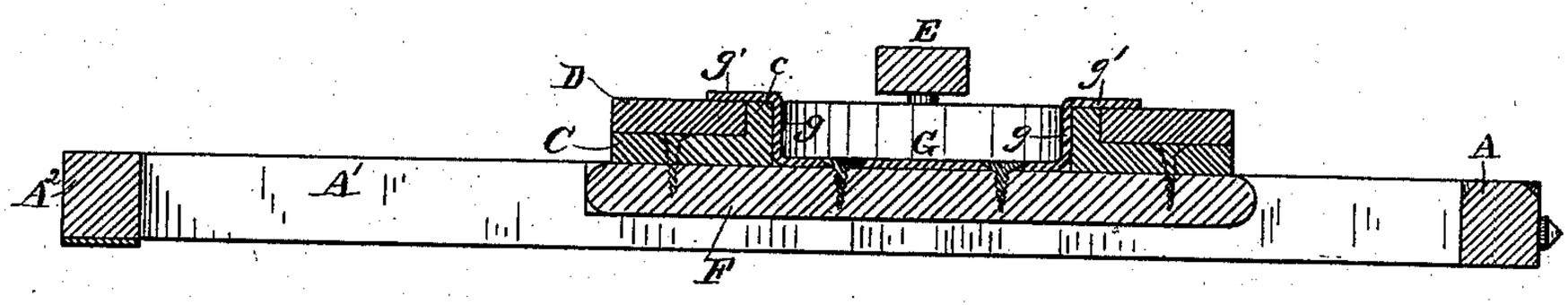


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM J. LACKIE, OF CANTON, OHIO.

IMPROVEMENT IN FIFTH-WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **221,831**, dated November 18, 1879; application filed August 1, 1879.

To all whom it may concern:

Be it known that I, WILLIAM J. LACKIE, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Platform-Frames and Fifth-Wheels for Wagons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the frames for platform-springs of vehicles, and in the fifth-wheels that are combined with said frames.

It has for one object to construct the frame and wheel of less material and of fewer pieces than have heretofore been used; and to this end it consists in forming the frame of four wooden pieces mortised together and strengthened by means of metal clamps extending from end to end of the frame, and bolted both to the end pieces and to the side pieces in such manner as to give them great durability; and in order to strengthen the frame still more, I place the lower part of the fifth-wheel directly upon the side pieces, and so secure it thereto that the wheel operates as a brace for the side pieces.

Another object is to provide an improved fifth-wheel, which consists of two parts, that are extremely simple in form, and that are loosely clamped together by a simple but effective clamp. To this end I construct the fifth-wheel of two annular plates, the lower of which is cast with an upwardly-projecting flange at its inner periphery, and the upper of which is mounted outside of said flange, and is prevented from escaping from proper position by means of a peculiar clamp or clamps attached to the lower part after the upper part has been put in place.

Figure 1 is a perspective view of my improved device. Fig. 2 is a vertical section through the same.

In the drawings the frame is represented as constructed of the rear bar, A, the side pieces, A′ A′, and the front bar, A^2. These parts are joined together by mortise and tenon, as shown at *a a*.

B B are metal clamps, extending from the rear bar, A, to the front bar, A^2, being bolted or otherwise firmly secured to said bars and to the outside of the side bars.

I have found that a frame constructed in this manner is much stronger than those of the ordinary construction, and requires much less material and fewer parts. The frame and wheel are supported upon three platform-springs, two of which are attached to the axle at right angles thereto, and of which the third is situated in rear of the axle, and is attached at its ends to the rear ends of the side springs, respectively.

The frame above described is supported at the rear end by placing the rear bar, A, upon the rear spring and bolting it thereto, and at the front end by attaching the ends of the front bar, A^2, to the front ends of the side springs, respectively.

The tongue or shafts may be fastened to the front bar, A^2, by any ordinary means of connection.

The fifth-wheel is supported upon the side pieces, A′ A′, of the frame, and it is composed of the two plates C and D. The lower part, C, is formed with a flange, *c*, around its inner edge to furnish a bearing for the upper part of the wheel. This plate C is bolted to the pieces A′ A′ of the frame, and operates to securely brace them at a proper point between the ends. The upper part, D, of the wheel is formed with a central opening large enough to permit it (said upper part) to surround the flange *c*.

The flange forms a large bearing for the wheel, and at the same time avoids the necessity of the king-bolt, making a much stronger and safer construction. The wagon-bed is bolted to the cross-bar E.

A simple but perfectly efficient means for holding the parts of the wheel together is provided, as follows: F is a bar bolted to the under side of the lower part, C, of the wheel, and situated substantially upon the central longitudinal line of the frame A A′ A^2. G is a guide or clamp piece, bent at the proper points and angles to form the vertical parts *g* and the horizontal parts *g′*. After the parts C and D of the wheel have been put together this piece G is bolted to the bar F, so that the parts shall be situated in the central opening of the

wheel, and so that the horizontal parts g' shall extend over the flange c and over part of the upper surface of the wheel. This prevents any displacement of the parts of the wheel, and holds them firmly together.

The cross-bar E is held by means of washers or other suitable device sufficiently far above the plate D to permit the cross-bar to rotate freely above the guide or clamp pieces g' g'.

What I claim is—

The combination of the bar F, bolted to the under side of the fifth-wheel, and the locking-bar G, bolted to the said bar F within the central open space of the wheel, and extending continuously from one side of said open space to the other, and bent to form the vertical parts g and the horizontal parts g', with the fifth-wheel, composed of the annular plate C, provided with the flange c at one edge, and the plate D, the outer edge of which is flush with the outer edge of the lower part, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM J. LACKIE.

Witnesses:
J. P. FAWCETT,
HENRY FISHER.