(No Model.)

J. M. FOOTE.

FIFTH WHEEL.

No. 321,203. Patented June 30, 1885.

Fig. 1.

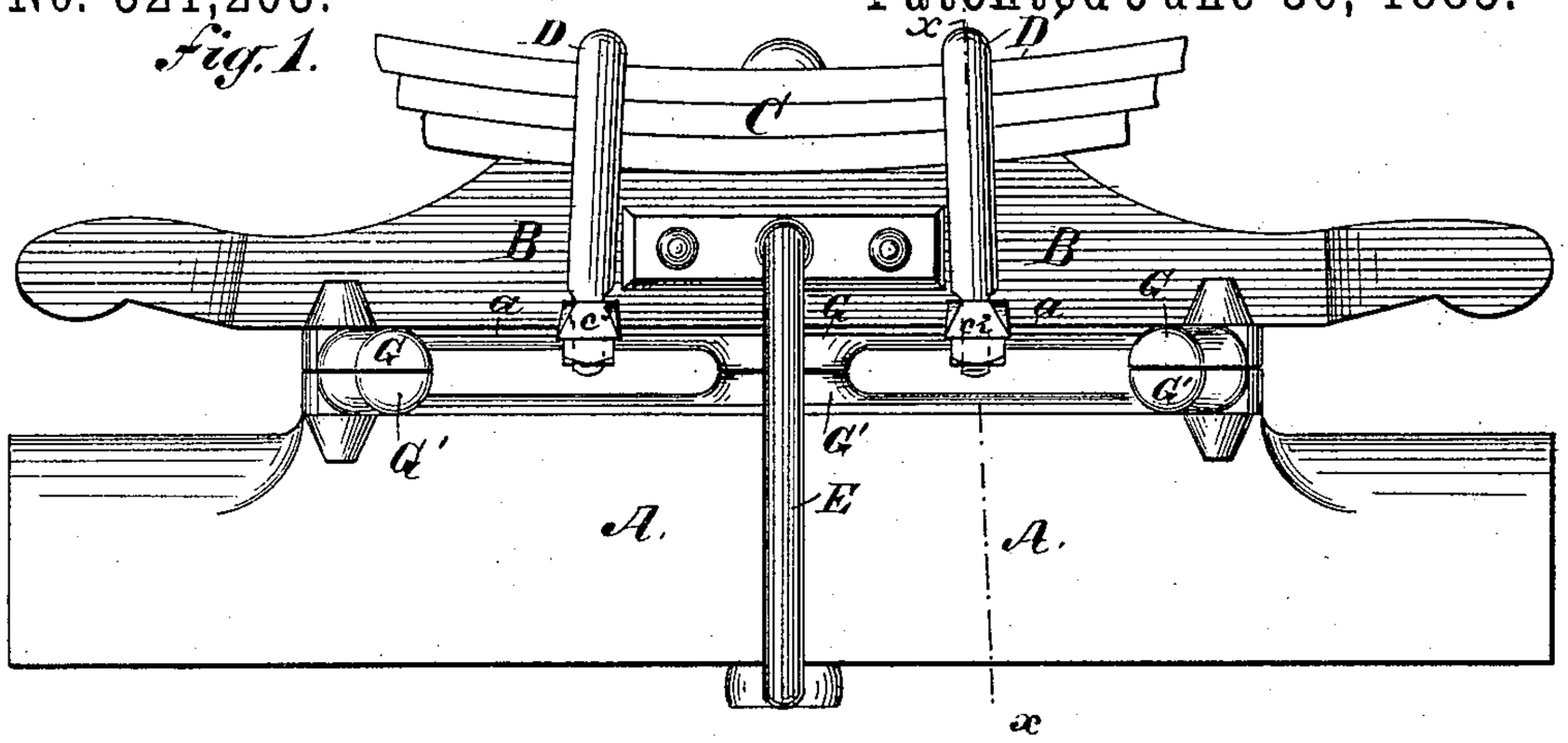

Fig. 2.

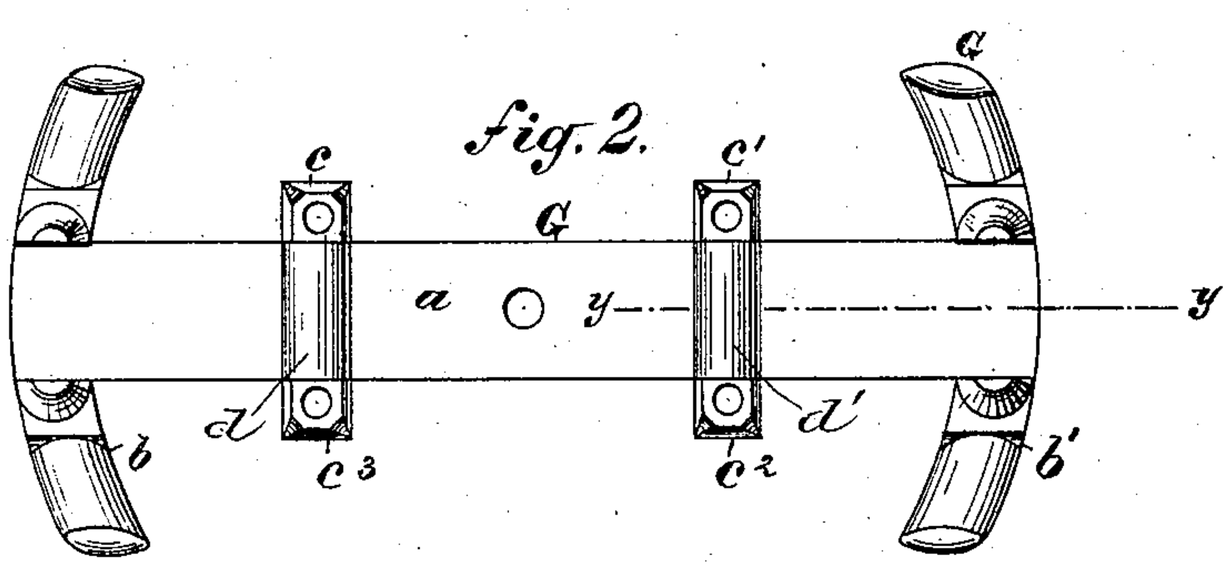

Fig. 3.

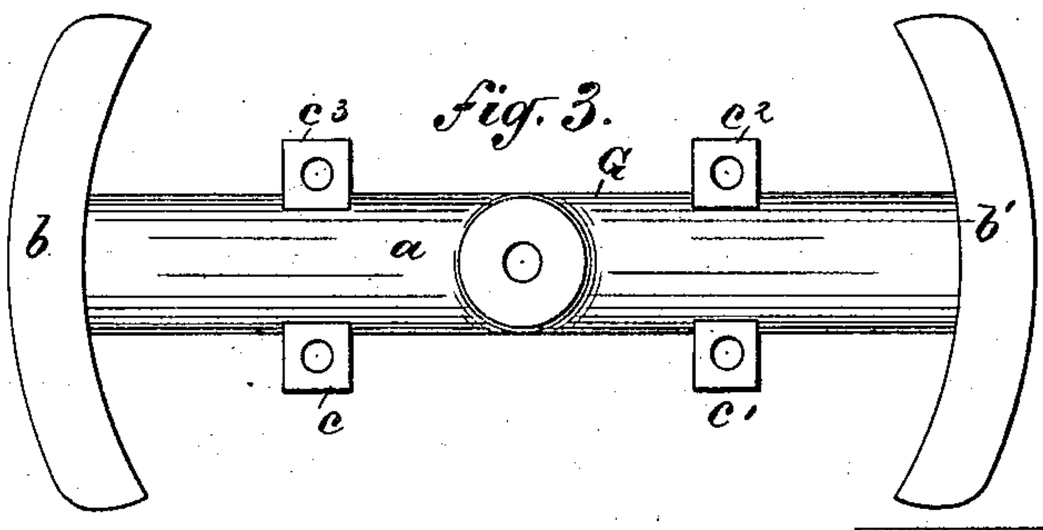

Fig. 5.

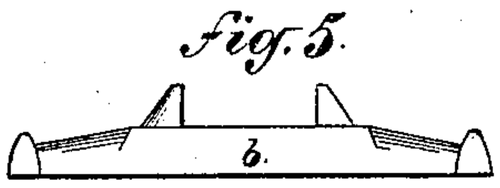

Fig. 6.

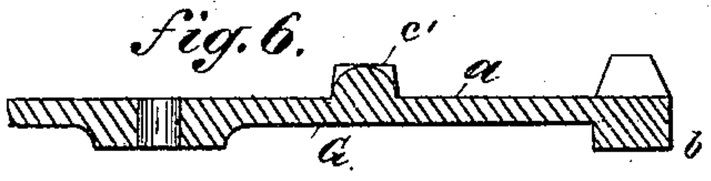

Fig. 4.

Witnesses:
Henry Eichling
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his Atty.

UNITED STATES PATENT OFFICE.

JULIUS M. FOOTE, OF NEWARK, NEW JERSEY.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 321,203, dated June 30, 1885.

Application filed October 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, JULIUS M. FOOTE, of Newark, in the county of Essex and State of New Jersey, and a citizen of the United States of America, have invented an Improvement in the Fifth-Wheels of Carriages, of which the following is a specification, reference being had to the accompanying drawings, forming part of the same, in which—

Figure 1 is a front elevation of a part of a carriage-axle, and the bolster, fifth-wheel, spring, and clips for securing the parts together. Fig. 2 is an outer face view of the upper part of the fifth-wheel. Fig. 3 is an inner face view of the same. Fig. 4 is a vertical section on the line *x x*, Fig. 1. Fig. 5 is an end elevation of the said fifth-wheel; and Fig. 6 is a longitudinal section on line *y y*, Fig. 2, of a part of the same.

My invention relates to the special construction of the said fifth-wheel herein described and claimed.

A is the middle part of a carriage-axle. B is the bolster, and C represents the middle portion of several leaves of an elliptical or semi-elliptical steel spring.

D D′ are clips by which the said spring is held in place on the boltster, and E and E′ are braces by which the bolster is supported on and secured to or held in place on the axle.

G′ and G together constitute the fifth-wheel, the former resting on and secured to the upper face of the axle and the latter secured to the under face of the bolster and resting on the part G′. My invention has reference to the form and construction of the said part G of the fifth-wheel. This part of said fifth-wheel as I construct it consists of the bar *a*, the curved heads or cross-bars *b* and *b′*, and the lugs *c c′ c² c³*, all being parts of one and the same piece of metal, and forged or formed integrally whole. The upper face of the bar *a*, upon which the bolster rests, is plane, and is secured thereto. The lower or under face of the same is preferably convexly rounded from side to side, and the lower faces of the said lugs are on a level with the center of the convexity. The said lugs *c c′ c² c³* project laterally from the edges of the bar *a* and vertically above the outer or upper face of said bar. Ribs *d d′* are formed on the upper face of the bar *a*, extending between and uniting and strengthening the lugs *c c′ c² c³*. The said ribs *d d′*, which are intended to be notched into the under face of the bolster B, are rounded, so as to present no angles to the notch in the bolster, as represented clearly in Figs. 2 and 6. This configuration of these ribs is important, and constitutes an essential feature of my invention. Angular ribs terminating in lugs somewhat similar to the lugs *c c′* have been used; but with such a rib the notch in the bolster is made correspondingly angular, and checking of the wood of the bolster at the angles in the notch is apt to occur. By rounding the face of the rib, and making the notch in the bolster correspondingly curved, the liability of checking of the bolster is obviated.

I make this fifth-wheel by first roughly forging a suitable piece of iron or steel approximately into the required form, and then stamping or pressing the wheel into the completed finished form in a suitable die.

The curved end cross-bars, *b b′*, project below the lower face of the bar *a*, so that when resting on the corresponding curved cross-bars forming part of G′ there will be a clear space between the said bar *a* and the corresponding bar forming part of G′ sufficient to allow the screw-threaded ends of the clips D D′ which project below the lower faces of the bar *a* to pass back and forth without touching said corresponding bar.

The lugs *c c′ c² c³* are drilled through vertically, and the ends of the clips D D′ pass through the holes and are provided with nuts, whereby the spring C, the bolster B, and the part G are firmly secured together.

What I claim as my invention, and desire to secure by Letters Patent, is—

As a new article of manufacture, the described part G of the fifth-wheel of a carriage provided with the perforated lugs *c c³* and the rib *d*, extending transversely across said bar *a*, said rib and lugs being integrally a part of said bar, and said rib being rounded, as and for the purpose described.

JULIUS M. FOOTE.

Witnesses:

A. G. W. VERMILYA,

DANIEL P. HERRICK.