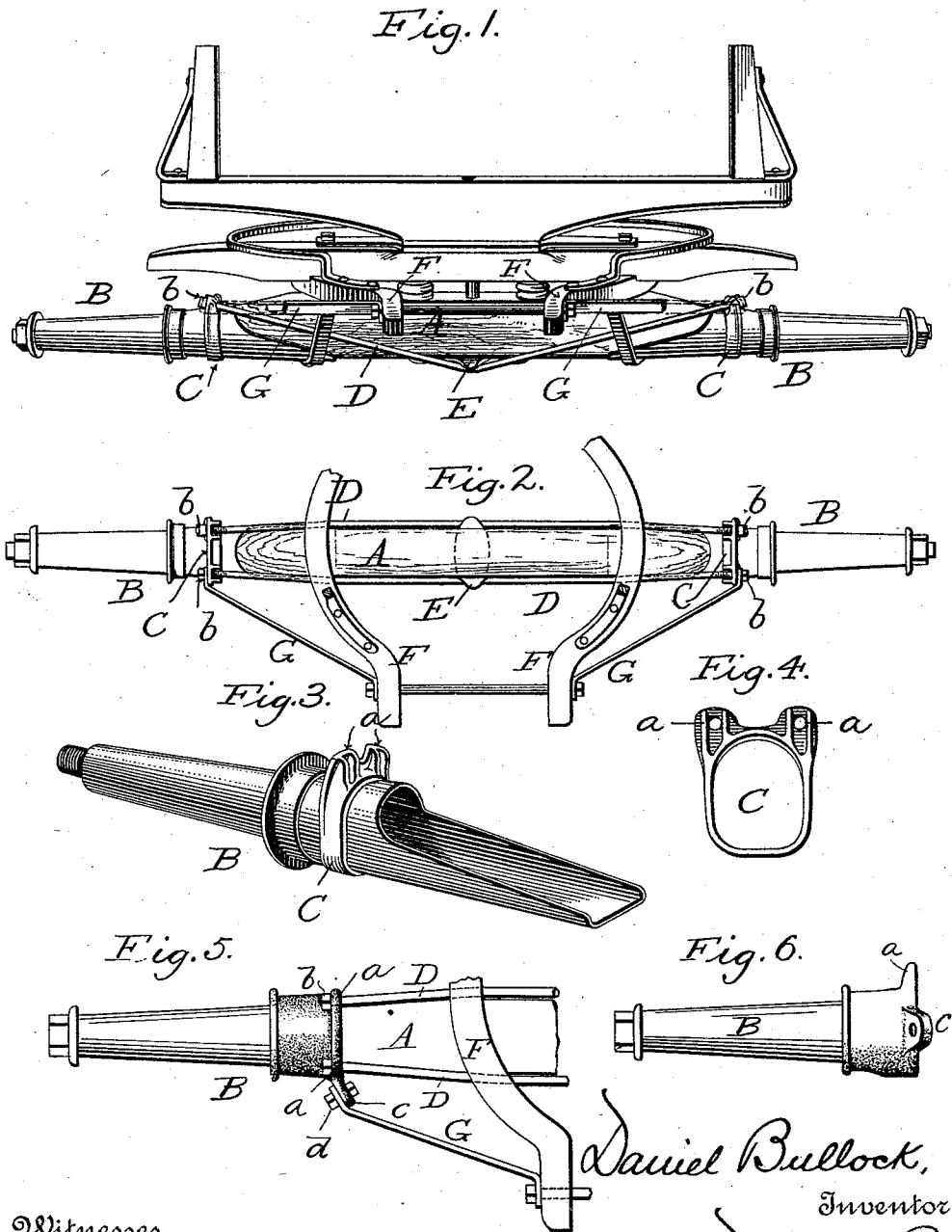


(No Model.)

D. BULLOCK.
WAGON AXLE.

No. 536,264.

Patented Mar. 26, 1895.



Witnesses

C. E. Burdine
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UNITED STATES PATENT OFFICE.

DANIEL BULLOCK, OF FORT ATKINSON, WISCONSIN, ASSIGNOR TO THE
NORTHWESTERN MANUFACTURING COMPANY, OF SAME PLACE.

WAGON-AXLE.

SPECIFICATION forming part of Letters Patent No. 536,264, dated March 26, 1895.

Application filed January 2, 1895. Serial No. 533,564. (No model.)

To all whom it may concern:

Be it known that I, DANIEL BULLOCK, a citizen of the United States, residing at Fort Atkinson, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Axles, of which the following is a specification.

My invention relates to axles, and consists in a novel construction of the same whereby the axle proper is trussed and the skeins held in place.

In the drawings,—Figure 1 is a perspective view of my improved axle with the bolster attached; Fig. 2, a top plan view of the axle with its skeins and truss rods; Fig. 3, a perspective view of one of the skeins; Fig. 4, a face view of one of the rings to which the rods are secured; and Figs. 5 and 6, plan and side views respectively, illustrating a modification in the construction of the skein.

A indicates the axle proper, and B B the skeins, enlarged at their inner ends where they fit upon the ends of the axle.

Fitting upon the tapering enlarged end of each skein is a ring C of the form shown in Figs. 1, 2, 3 and 4, the side and bottom walls of the skein, and the corresponding faces of ring C being flattened to preclude the turning of the ring upon the skein. This ring is provided at its top with two perforated ears *a a*, Fig. 4, which receive the ends of the truss rods D D, which latter extend along the sides of the axle from the lower face of the axle to the upper face thereof, as shown in Fig. 1. These rods are fastened to the rings, by means of nuts *b*, while at a point between their ends,—where they bend down to the lower face of the axle,—they pass under the ears or ends of a clip or plate E secured to the lower face of the axle, as shown in Figs. 1 and 2.

When the parts are once assembled, it will be seen that the skeins are held securely in position upon the axle; and that the axle is effectively trussed or braced.

Making the rings separate from the skeins enables them to be replaced readily if they become broken, without necessitating the throwing away of the skein; and, furthermore, permits of the more ready manufacture of the skeins where steel skeins are employed.

G G indicate braces which extend from the skeins to the bars F of the gear. At the front axle these braces would extend to the bolt that secures the tongue, but at the rear axle they would extend to the reach plate. These braces are secured to one of the ears *a* of ring C as shown in Fig. 2; but where cast skeins are employed, they would be secured by bolt *d* to a lug *c* cast on the side of the skein, as in Figs. 5 and 6, thus doing away with the clips generally used. In these figures, the lugs *a a* are represented as formed directly upon the skein instead of on a separate ring as in the remaining figures.

The axle thus constructed is effectually braced and trussed and its strength thereby greatly increased, and the skeins are held securely in position upon the axle.

Having thus described my invention, what I claim is—

1. In combination with an axle A; the skeins B fitted to the ends thereof; lugs *a a* on the top of the skeins, one at each side of the longitudinal center of the skeins; and truss rods D D extending from the lugs on one skein to those on the other skein, all substantially as shown and described, whereby the skeins are prevented from twisting or turning upon the axles, and an effective trussing of the axle is secured.

2. In combination with axle A, and skeins B B; the clip E on the under side of the axle; the rings C C applied to the skeins and provided with eyes at their top; and the truss rods engaging the clip and secured at their ends to the tops of the rings, substantially as shown and described.

3. In combination with axle A; skeins B B flattened as shown; the rings C C applied to the flattened portion of the skeins and provided with eyes *a a* in their top or upper edge; the clip E; and the truss rods engaging the clip and secured at their ends to the rings.

In witness whereof I hereunto set my hand in the presence of two witnesses.

DANIEL BULLOCK.

Witnesses:

J. F. SCHREINER,
L. B. CASWELL, Jr.