

W. W. KISNER.

AXLES.

No. 171,732.

Patented Jan. 4, 1876.

Fig. 1

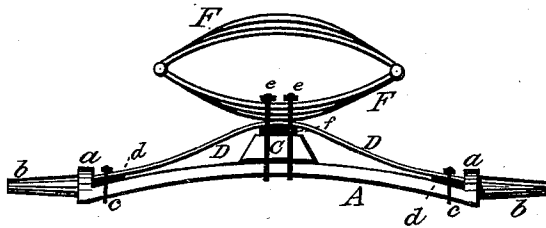
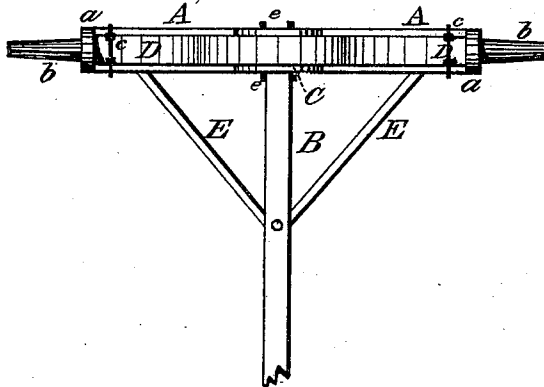


Fig. 2



Attest:

Wm. Bagger
C. A. Snow

Inventor:

William W. Kisner,
by Louis Bagger
his atty.

UNITED STATES PATENT OFFICE.

WILLIAM W. KISNER, OF GOSHEN, INDIANA.

IMPROVEMENT IN AXLES.

Specification forming part of Letters Patent No. 171,732, dated January 4, 1876; application filed
-October 9, 1875.

To all whom it may concern:

Be it known that I, WILLIAM W. KISNER, of Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Braces for Axles of Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, 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 the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a front elevation of a carriage or wagon axle, having my improvement; and Fig. 2 is a top plan of part of the running-gear of a vehicle, the axle of which is provided with my improvement.

Similar letters of reference indicate corresponding parts.

This invention consists in the combination of an iron or steel axle having a supporting-brace made of iron or steel, and blocks or pads made of felt or similar soft material; and its object is to make the axle stronger, lighter, neater in appearance, and more elastic.

In the drawing, A represents an ordinary iron or steel carriage-axle, having the collars *a* and spindles *b*. To the end of the reach B is affixed a wooden block, C, which is bolted

onto the axle A over its middle. D is the brace, which consists of an iron or steel strip bent into the configuration shown in Fig. 1, so that the ends of said brace abut against the collars of the axle, to which they are secured with the clips *c*, that take the reach-braces E. A pad (denoted by *d*) is inserted between the axle and the brace where these come together at the collars, for the purpose of adding to the elasticity and taking up any sudden shock or jerk when the wheels pass over an obstruction. The brace D is stayed upon the block C by the clips *e*, that stay the spring F, a pad, *f*, being placed between the top of the block C and the under side of the brace.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a vehicle-axle, A, having the brace D, the blocks or pads *d* *d*, *f*, held in place by clips *c* *c* *e* *e*, substantially as and for the purpose shown and specified.

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

WILLIAM W. KISNER.

Witnesses:

HENRY E. BONFER,
JOHN PAULUS.