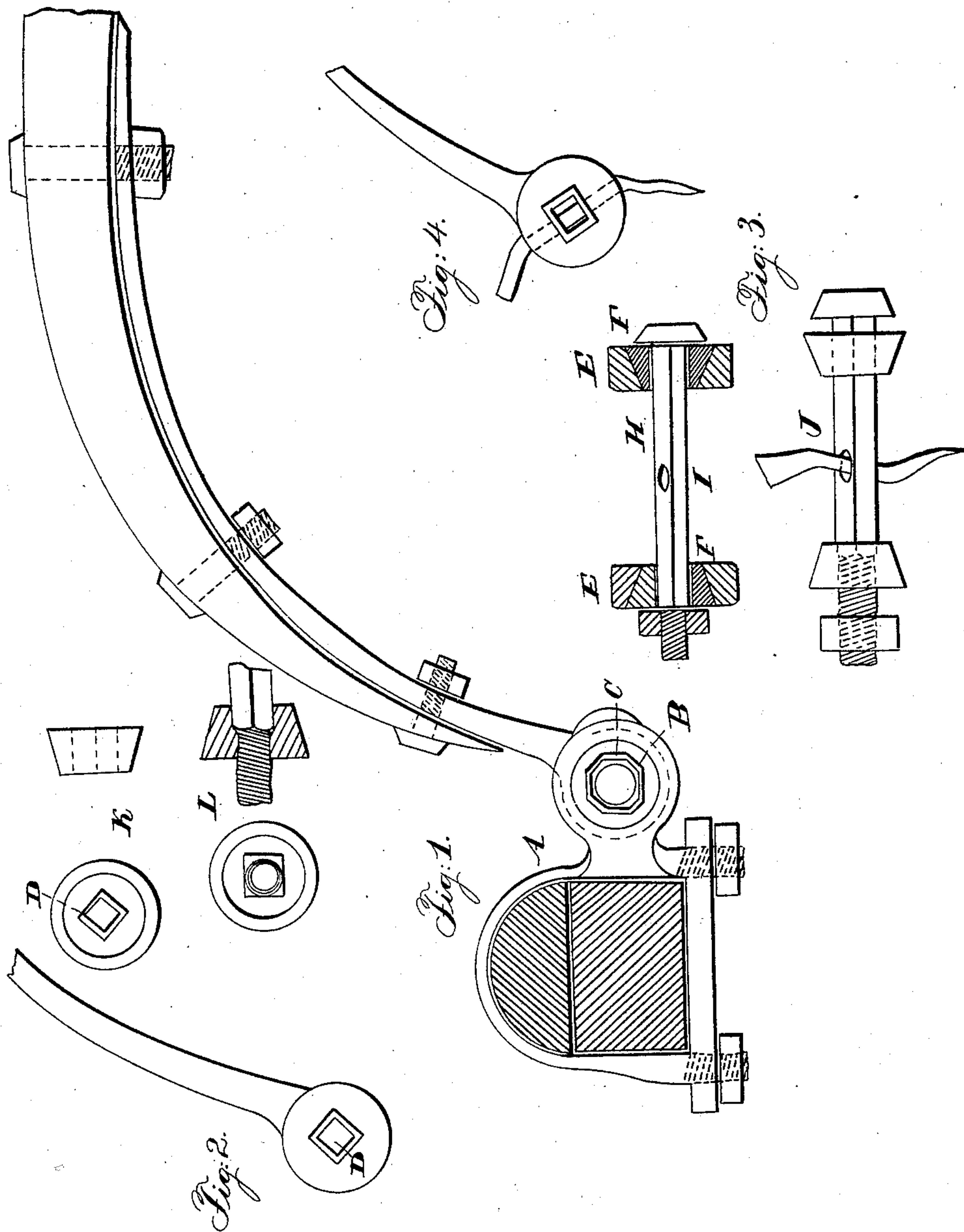


L. M. B. COLEMAN

Thill-Coupling.

No 58,071.

Patented Sept 18, 1866.



UNITED STATES PATENT OFFICE.

LUCIUS M. B. COLEMAN, OF DANBY, NEW YORK.

IMPROVEMENT IN WAGON-SHACKLES.

Specification forming part of Letters Patent No. 58,071, dated September 18, 1866.

To all whom it may concern:

Be it known that I, LUCIUS M. B. COLEMAN, of the town of Danby, in the county of Tompkins and State of New York, have invented an Improved Shaft-Shackle for Wagons and other Vehicles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My object is to make such an attachment of the shafts or pole to the wagon as to be secure, free from rattling, be easily adjusted, little liable to get out of order by the wear of the parts, and which can be tightened from time to time, and prevent or correct the deficiencies caused by the wear. To meet these and other indications I make a square hole through the shaft or thill or pole iron, instead of the usual round one for the bolt, or I use a round bolt through the shaft or pole iron, and prevent any motion thereon by dowel-pins or other devices between the shaft-iron and the washers in the ears of the shackle; and I insert washers or metallic beveled cylinders or wheels into the eyes of the ears of the shackle, and make the burr or nut hold only against the washer; and I make the holes through the washers square, or I use dowel-pins, or corrugated or toothed surfaces, so that they may be immovable on the bolt, but the outside of the washers smooth, that they may readily move in the eyes of the ears of the shackle. This is seen in the figures, where—

Figure 1 is a side view of my wagon-shackle. In it A is the shackle, encircling an iron and wood axle, and is held in place on the axle by a plate and burrs or nuts, and the shaft or pole iron is seen fastened to a part of the said shaft or pole; and B is the burr or nut that holds the bolt in place when through the shaft-iron and shackle-ears; and C is the part of the device, which I have termed the "washer," "cylinder," or "wheel," in the eye of the ears of the shackle.

Fig. 2 is a view of the shaft or pole iron, showing D, the square hole through it.

Fig. 3 shows certain parts of my shackle, drawn separately. At E and E are sections of the ears of the shackle, with sections of the washers F F, having the square holes through them for the square bolt H to pass through.

The slotted hole I is seen in the middle of the bolt, and the same slotted hole I, I use with a round bolt, as dowel-pins, corrugated or toothed surfaces, or other similar devices prevent the motion at this place, and allow my use of the wire or leather through the hole I. At J the same parts are drawn without the ears of the shackle. At K is both a side and an end view of the washer; and at L is figured the washer, cut in part square, and in part with a thread of a screw in the hole thereof.

Fig. 4 shows a leather cord through the hole in the shaft or pole iron.

The uses of the several parts are clear. The square bolt and fitting-holes in the washers or other device for rendering the parts alluded to immovable when adjusted cause the wearing-surfaces to bear on the ears of the shackle and on the periphery or outside of the washers. This gives the burr or nut a secure hold, as there is no motion between it and its washer. The large surfaces of the washers give large wearing-surfaces, which are more durable than small ones. The beveled wearing-surfaces, fitting each other, are especially adapted to prevent rattling, and admit of tightening the same at pleasure.

The other uses, advantages, and the making of my device are apparent to those skilled in the art to which it appertains.

I claim—

1. The use of washers or metallic cylinders in the ears of a wagon-shackle to transfer as far as possible the wear in the shackle-joint to the surfaces made by the periphery of the same, and the said ears, when virtually made as described.

2. The described beveling of the washers and of the corresponding holes in the ears of the shackle, for the purpose of tightening the shackle from time to time, as described.

3. The combination of the described device or devices for preventing motion about the iron bolt, but allowing the same about the washers or cylinders, and of the washers or cylinders in the eyes of the ears of the shackle with the wearing-surfaces in the said ears, the same making a whole, as described.

LUCIUS M. B. COLEMAN.

Witnesses:

SAMUEL J. PARKER,
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