

No. 639,013.

Patented Dec. 12, 1899.

W. H. BOWE.
VEHICLE BODY LOOP.

(Application filed Nov. 4, 1898.)

(No Model.)

Fig 1

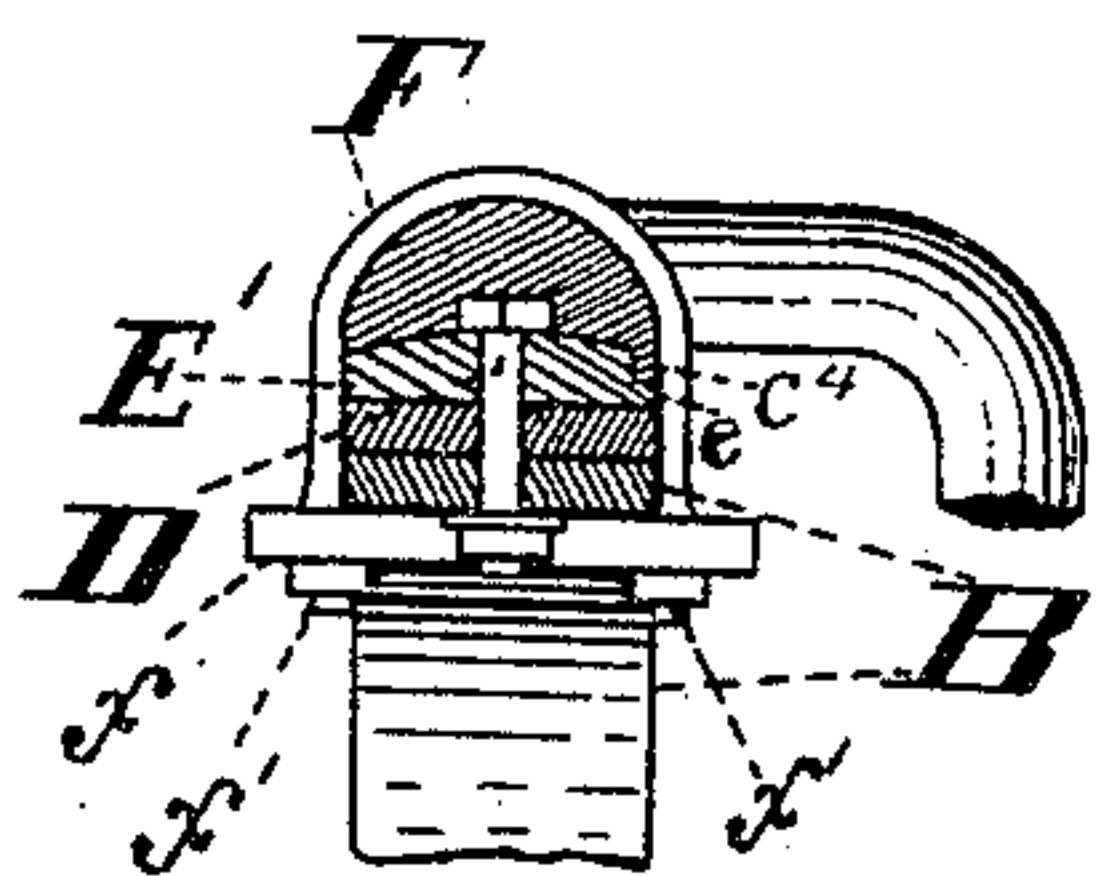
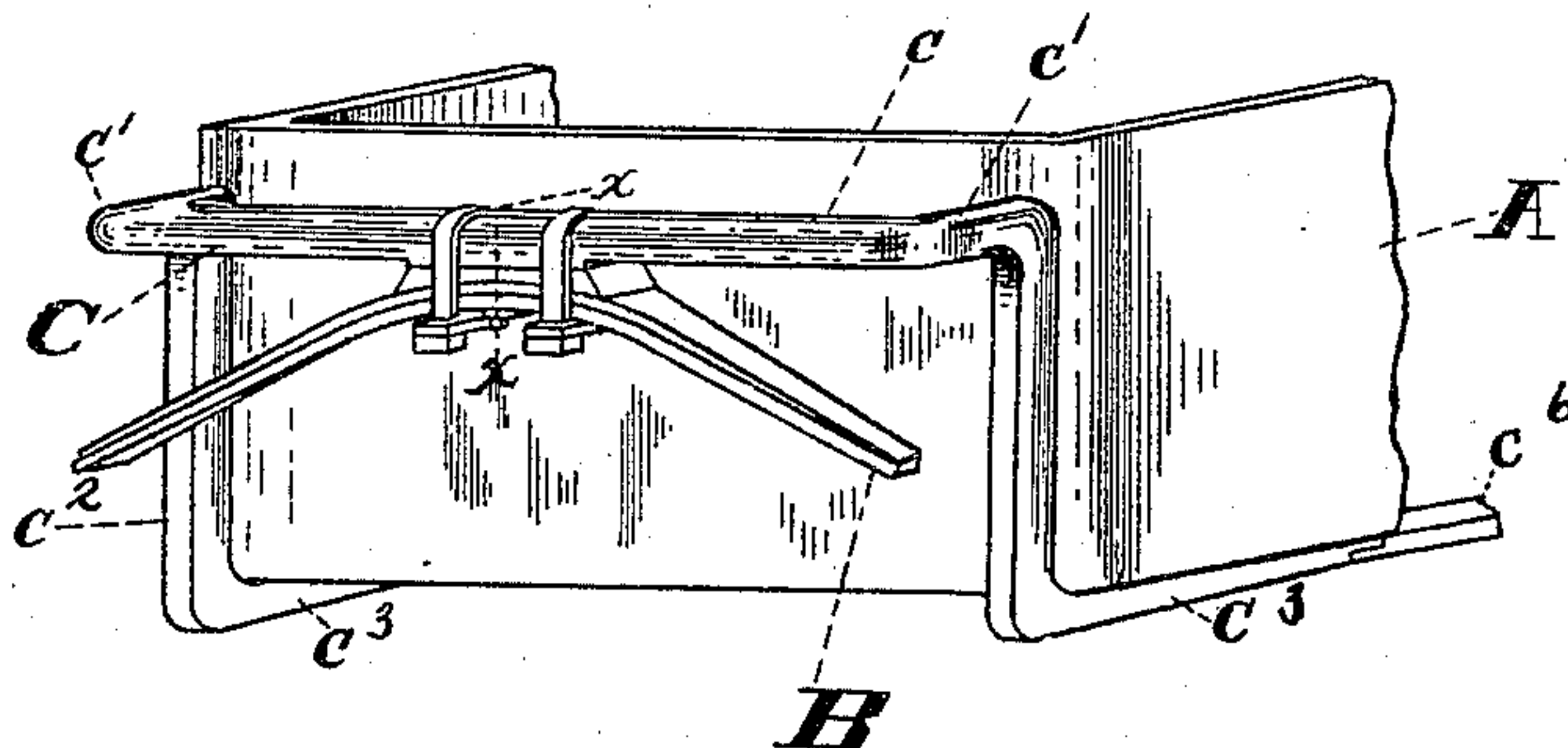


Fig 4

Fig 2

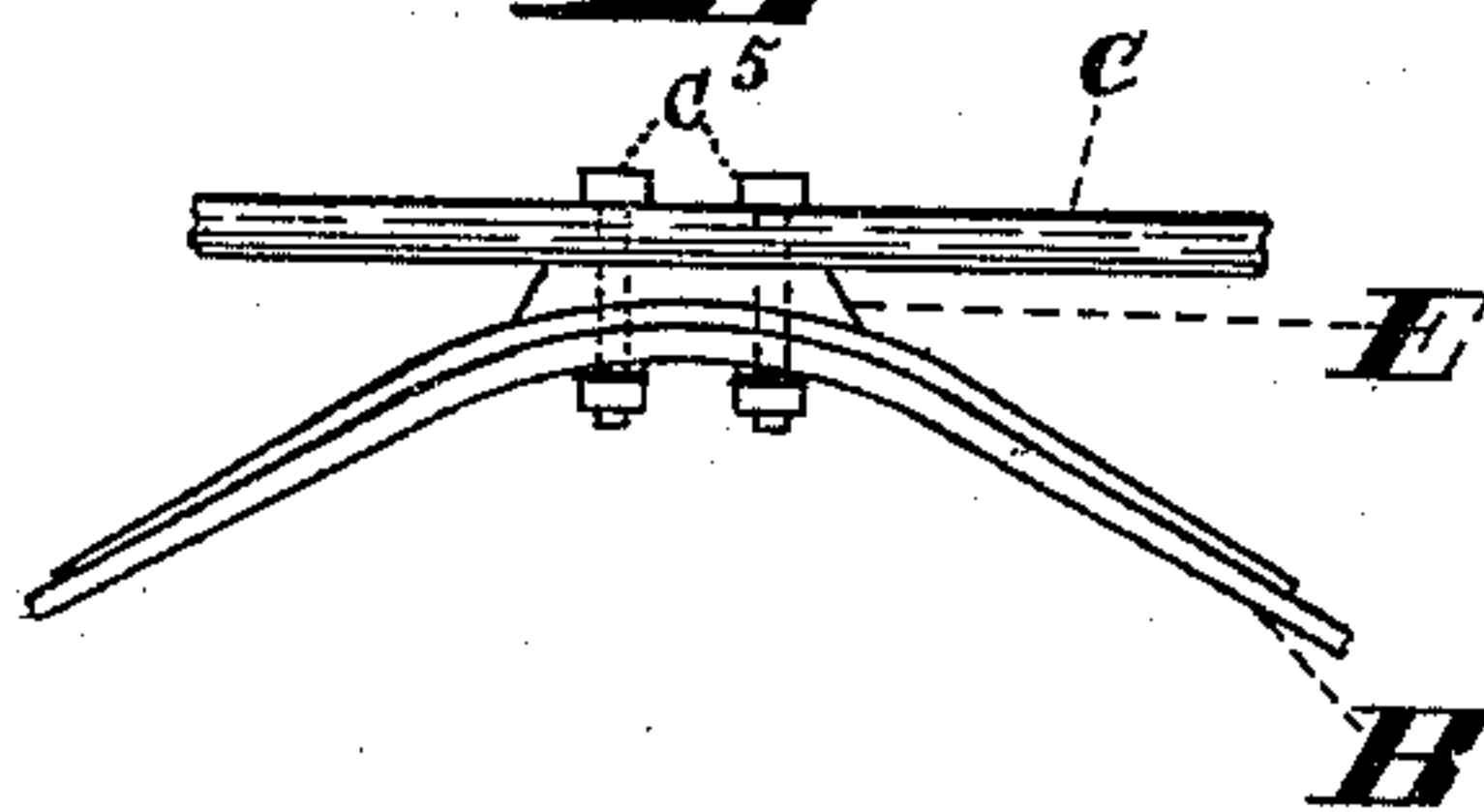
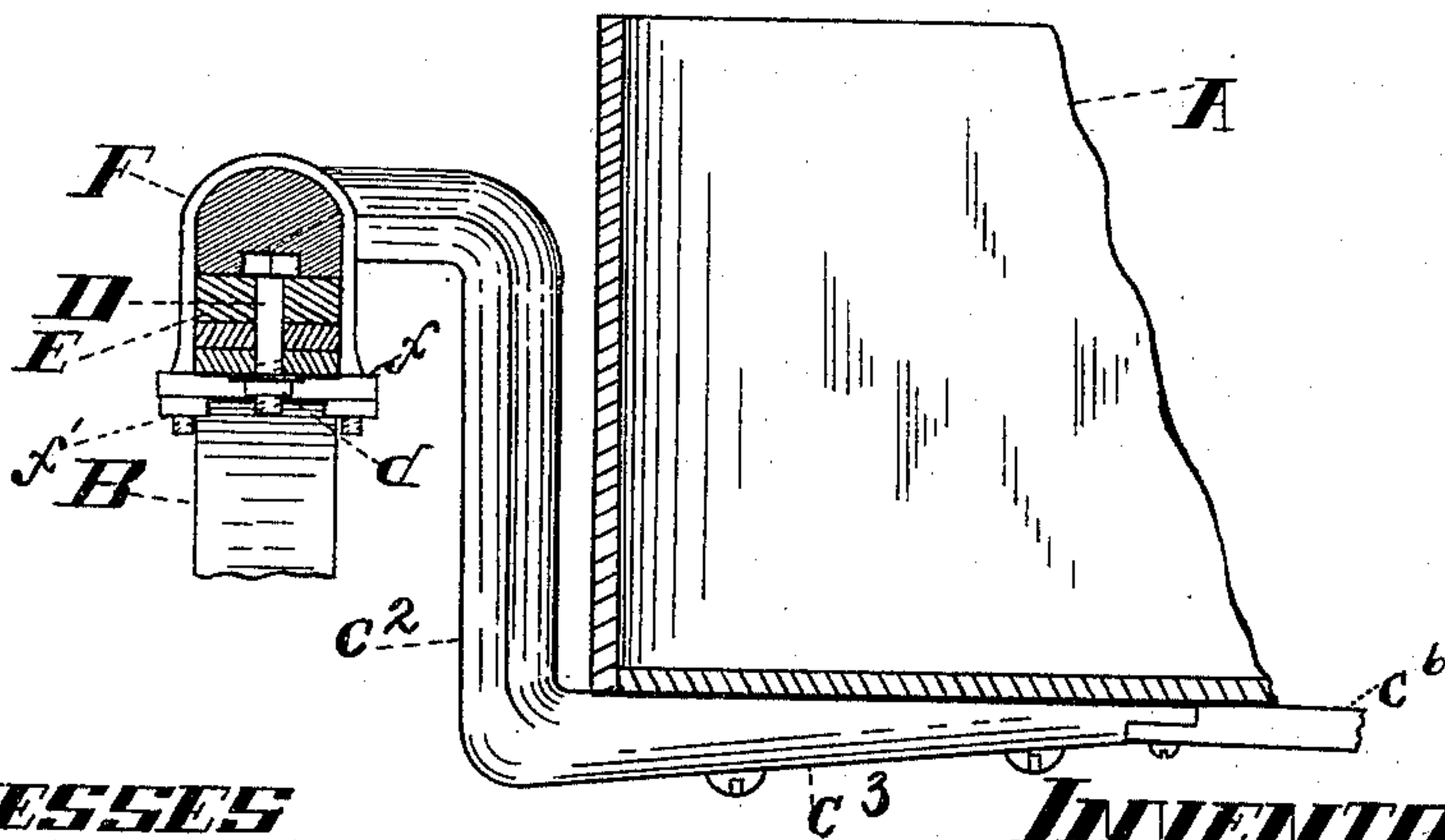


Fig 3



WITNESSES

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WILLIAM H. BOWE, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO
DAVID POOLE, OF SAME PLACE.

VEHICLE-BODY LOOP.

SPECIFICATION forming part of Letters Patent No. 639,013, dated December 12, 1899.

Application filed November 4, 1898. Serial No. 695,421. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BOWE, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Vehicle-Body Loops, of which the following is a specification.

The object of my invention is to provide means for coupling the body of vehicles, and especially buggies, to the spring-gear; and it consists in providing the loops and bar in a single piece without the use of shackles, clips, or other appliances, which, in addition to their expense in fitting, permit an unsteady movement of the body and soon become loose and rattle.

The invention is especially applicable to light buggies or wagons in which the elliptic spring is employed and the body hung low between the elliptic springs.

These objects I accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my loop with so much of the ordinary piano-box buggy and elliptic spring as illustrates its application for use in its simplest form. Fig. 2 is a slight modification of the same, in which bolts are used to couple the loop and elliptic spring instead of the ordinary spring bar-clips. Fig. 3 is a vertical central longitudinal section, upon an enlarged scale, taken through line *xx* of Fig. 1. Fig. 4 is a detail view, in central vertical section, of my preferred form of loop.

The body A and elliptic spring B are of ordinary construction, and need not therefore be specifically described further than that the lower members of the elliptic springs at each end are coupled the one to the gear over the rear axle and the forward one to the fifth-wheel block in the usual manner.

The body-loop C consists of a straight bar *c*, having two ends or arms *c'* returned inwardly toward the body and two downwardly-returned arms *c''*, which terminate in rearwardly-returned arms *c'''* to pass under and be secured to the bottom of the body A upon each side by screw-bolts or in any other suitable manner. The loop is preferably formed of malleable casting in a single piece and has

an angular depression on the under side of the transverse member *c* to receive the angular head of the bolt D, which passes centrally through the spring-block E, which is preferably of wood or similar material, to form a somewhat yielding cushion between the under side of the loop and the top of the elliptic spring B. The angular head of the bolt entering the angular depression in the under side of the loop holds it steady while the nut *d* is tightened up against the under leaf of the spring B. The same result would be accomplished, but not so efficiently, by making the angular depression in the under side of the cushion-block E instead of the under side of the transverse bar *c* of the loop C.

In the form shown in Figs. 1 and 3 the clips F and clip-bars *f* are employed to couple the spring to the body-loop by means of nuts *f'* on the lower screw-threaded ends of the clips F. In Fig. 2 ordinary bolts *c⁵* are employed for the same purpose. The inner ends of the front and rear loop-arms *c³* are for strength and neatness of appearance connected by metal straps *c⁶*, which are secured to the under side of the body and to the inner ends of the arms by screws.

The preferred form of loop shown in Fig. 4 has its bearing, which rests on the cushion-block E', slightly concave in cross-section and has a flange *c⁴* extending downwardly from its inner edge, which seats on an inwardly-extended flange *e* from the block E'.

The loop may be of any approved form in cross-section, excepting the under side of the bar C and upper side of the inwardly-projecting arm *c³*, which are made to fit against the bottom of the body and the top of the spring-block E.

It is obvious that in this construction the loops cannot sag in either direction, whether the vehicle is running on level or uneven ground, and that the loop coupling the springs to the body is absolutely rigid and prevents all rattling or swaying of the body in either direction.

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

1. The hereinbefore-described body-loop having its transverse bar, to pass over and bear directly down on the spring when se-

cured to couple the body and gear, inwardly-projecting arms and vertical arms connecting the same formed of a single piece, substantially as shown and described.

5 2. The hereinbefore-described body-loop consisting of the transverse bar, having inwardly-projecting upper and lower arms and vertical connecting-arms formed of a single piece, the said transverse arm having an angular perforation in its under side to receive
10 the angular head of the bolt coupling the springs to the spring-block.

3. The hereinbefore-described body-loop consisting of the transverse bar having downwardly-projecting central flange, inwardly-
15 projecting upper and lower arms and vertical

connecting-arms, the whole formed integral, substantially as shown and described.

4. The combination as hereinbefore set forth of the body, the gear, the elliptic springs
20 mounted upon and forming part of the gear, the body-loop consisting of the transverse bar, having the inwardly-projecting arms and vertical arms connecting them formed in a single piece, the spring-block, the bolt coupling
25 the spring-block to the springs and the clips coupling the body-loop and springs.

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Witnesses:

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