

(No Model.)

B. F. GORSUCH.

SINGLE TREE PLATE.

No. 372,614.

Patented Nov. 1, 1887.

Fig 1

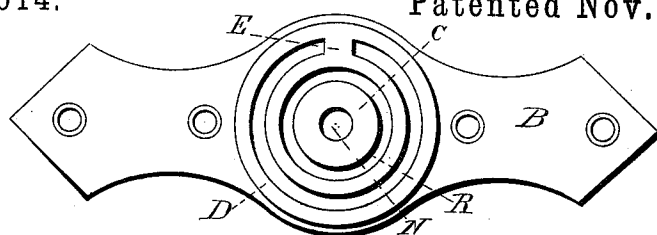


Fig 2

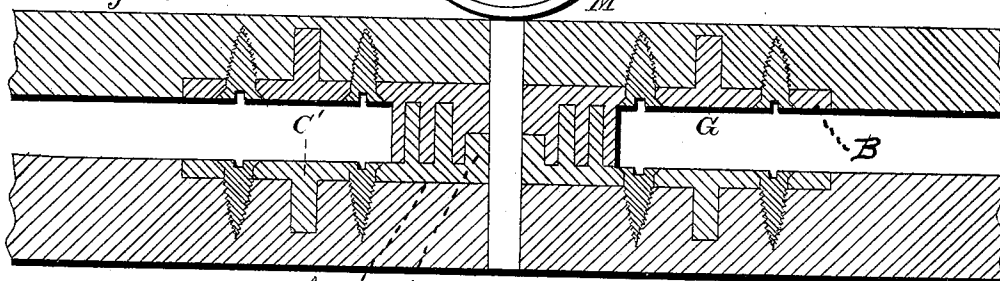
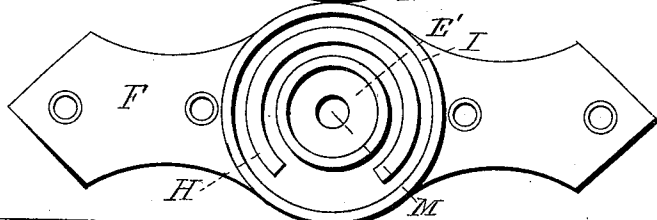


Fig 3

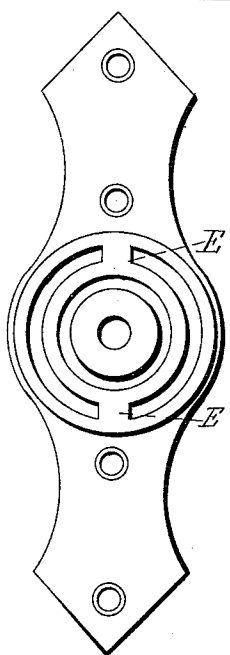
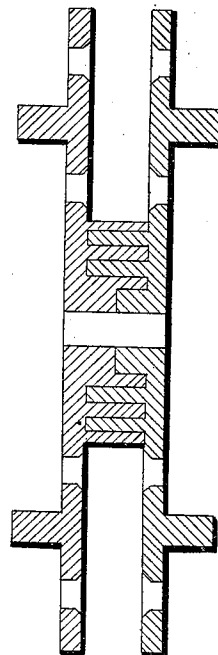
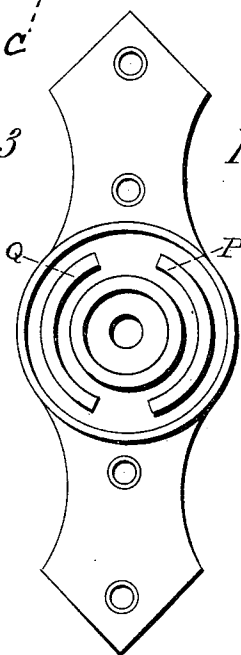


Fig 4



WITNESSES
H. B. Harris
Ben. Fugitt.

INVENTOR
B. F. Gorsuch
by E. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN F. GORSUCH, OF MARTINSBURG, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO JOHN T. SHIRLEY, OF SAME PLACE.

SINGLETREE-PLATE.

SPECIFICATION forming part of Letters Patent No. 372,614, dated November 1, 1887.

Application filed March 9, 1887. Serial No. 230,262. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. GORSUCH, a citizen of the United States, and a resident of Martinsburg, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Singletree-Plates; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view of singletree-plates. Fig. 2 is a sectional view of same; Figs. 3 and 4, modification of same.

My invention relates to singletree-plates for vehicles; and it consists in the construction and novel combination of parts, as hereinafter described and claimed.

Referring by letter to the accompanying drawings, A designates the cross-bar of the thills, or the connecting-bar, where double-trees are used.

The application of the plates being similar in both cases, the thills and singletree will be shown to illustrate the invention.

The singletree-plates are made in pairs comprising an upper plate and a lower plate.

B designates the lower plate, the arms of which are provided with screw-holes for the securing-screws and depending studs C', which latter enter the wood of the cross-bar A and relieve the securing-screws from the lateral strain that would otherwise come upon them. At the middle of its length the lower plate, B, is provided with a flanged boss, C, which is surrounded by an annular flange, D, which is connected to the boss C at one point by an integral partition, E, so as to leave a nearly annular seat or recess, R, between the flange D and the flanged boss C. The flanged boss C is a female boss and receives the male boss E' of the upper singletree-plate, F.

The arms of the upper plate, F, are provided with upwardly-projecting studs G, which enter seats in the wood of the singletree and relieve the securing-screws of the lateral strain that would otherwise come upon them. The arms of this plate are also pro-

vided with screw-holes for the securing-screws. The boss E of the upper plate, F, is nearly surrounded by a curved depending flange, H. The flange H is surrounded by a depending annular flange, I, a space, K, being left between the flange I and the flange H, into which recess the annular flange D of the lower plate, B, fits when the plates are connected. The bolt-holes M N in the bosses of the two plates B F are aligned when the plates are put together, and a securing-bolt is passed through said holes to secure the singletree properly in place.

In a modification of the lower plate the flanged boss is connected to the flange surrounding it by two diametrically-disposed partitions, E. In this instance the curved flange H is dispensed with and two opposed curved flanges, P Q, are provided. The effect in this instance is the same as with the single flange H; but the amount of material used is less and the plates are made with less expense. By employing either of these styles of plates the singletrees can turn far enough on their pivots to permit them to operate properly and promptly; but they will not turn entirely around, and will almost be in convenient position to permit the team to be hooked up. As the strain is removed from the securing-screws by the studs engaging the wood, the plates will remain in place for an indefinite period.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with a singletree-plate having a central boss provided with a bolt-hole, an encircling flange connected to an outer encircling flange by a radial rib, of a singletree-plate having a central bolt-hole, an annular rib or flange surrounding the bolt-hole, a concentric arc outside of said annular flange, and an encircling flange or rib outside of said concentric arc, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN F. GORSUCH.

Witnesses:

L. W. PORT,
M. L. KAUFFMAN.