A. E. BROCKETT

WHIFFLETREES.

No. 194,985. Patented Sept. 11, 1877.

Fig: 1.

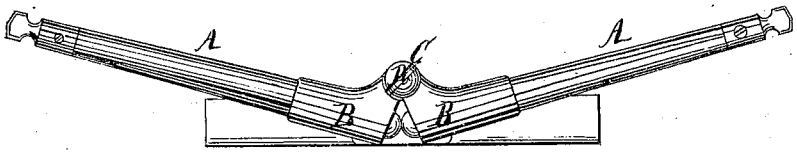


Fig: 2.

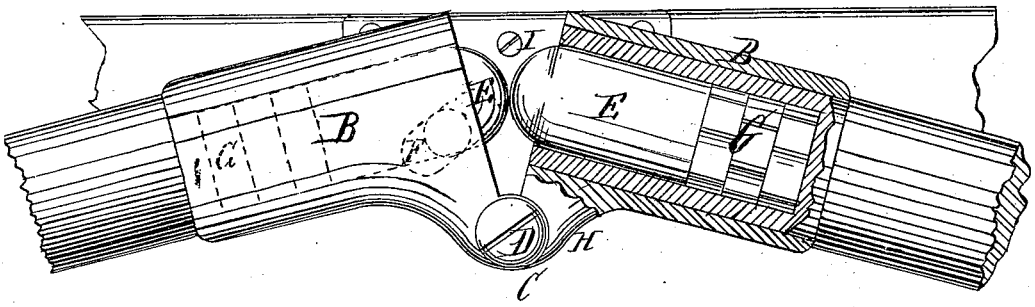
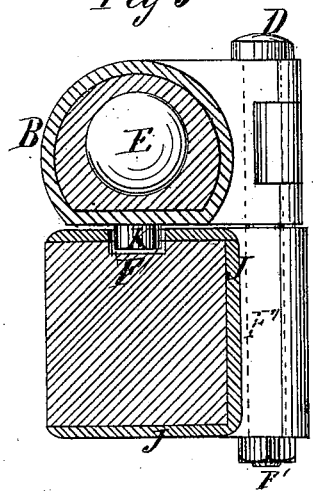


Fig 3



Witnesses.

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ATWATER E. BROCKETT, OF BRANFORD, CONNECTICUT.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **194,985**, dated September 11, 1877; application filed August 3, 1877.

To all whom it may concern:

Be it known that I, ATWATER E. BROCKETT, of the town of Branford, county of New Haven, and State of Connecticut, have invented a new and useful Improvement in Whiffletrees, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top view. Fig. 2 is an enlarged view, partly in section. Fig. 3 is a cross-section.

The object of my invention is to produce a whiffletree that will yield when the vehicle strikes any obstruction in the road, and relieve the strain on the horses or other animals drawing it, as well as on the vehicle itself.

I construct my whiffletree, of wood or other suitable material, in two or more sections, usually in two sections, as shown at A, Fig. 1. The two sections are connected together in the center by means of the ferrules B B, which are hinged on one side, as shown at C, Fig. 1. The two sections are held together, and also attached to the vehicle to be drawn, by means of the bolt D, Fig. 2, which passes through the hinges on the side of the ferrules, and through the casing of the double-tree or other part of the vehicle to which it is attached. On the lower side of the hinged ferrules on each section is a pin projecting downward about a quarter of an inch, more or less, as shown at K, Fig. 3. These pins work into a slotted or oblong opening in the metal piece attached to the double-tree or other part of the vehicle to which the whiffletree is attached.

The metal piece attached to the double-tree or cross-bar is made to incase three sides, and has two oblong angular holes or openings, F F, in the top, and a round opening to receive the bolt D, as shown at F′, Fig. 3. This metal piece is enlarged where the bolt D passes through, so that the bolt can pass through without going through the wood, as shown at H, Fig. 2. This metal piece is also attached to the double-tree or cross-bar by screws or bolts, as shown at I, Fig. 2.

In the hinged ferrules B B are pins or bolts E E, Fig. 2. Under or around these pins or bolts are metal or rubber springs, or other yielding substances, which force the bolts or pins out of the ferrules B B, as shown at G G, Fig. 2. The heads of the bolts or pins being brought in contact by the power of the springs, will force the two sections of the whiffletree backward as far as the oblong openings in the metal piece attached to the double-tree or cross-bar will allow them to go, as shown in Figs. 1 and 3.

The hinges are made so as to allow a movement at the outer ends of each section of six inches, more or less.

I do not confine myself to the precise way of regulating the movement of the sections by the oblong openings in the casing J, as the hinges can be cast with projections striking each other, so as to effect the same result.

The outer ends of the whiffletree are made in the usual manner, so as to attach the traces to them. The inner ends of each section where the ferrules and hinges are applied are bored into to receive the bolts or pins and springs, as shown at Fig. 2.

The hinged ferrules B B are made to turn on the bolt D in the usual manner. The part of the hinged ferrule resting on the double-tree or other point of contact with the vehicle is flat and smooth, to avoid friction.

The advantages of my invention are that it prevents the sudden jerking motion and strain upon the animals drawing the vehicle, as well as upon the vehicle itself, and those riding in it, as either wheel striking a stone or false bridge or other obstruction will be relieved by the action of the springs in the sections of the whiffletree.

Another advantage is that the slack in the traces is taken up by the action of the springs, keeping them always taut.

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

1. The yielding whiffletree composed of the two sections A A, the hinged ferrules B B, the bolts or pins E E, the springs G G, and bolt D, when arranged and operated substantially as and for the purpose herein set forth.

2. The yielding whiffletree composed of the sections A A, the hinged ferrules B B, the bolts or pins E E, the springs G G, and bolt D, in combination with the metal piece or casing J, substantially as shown and described.

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Witnesses:
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