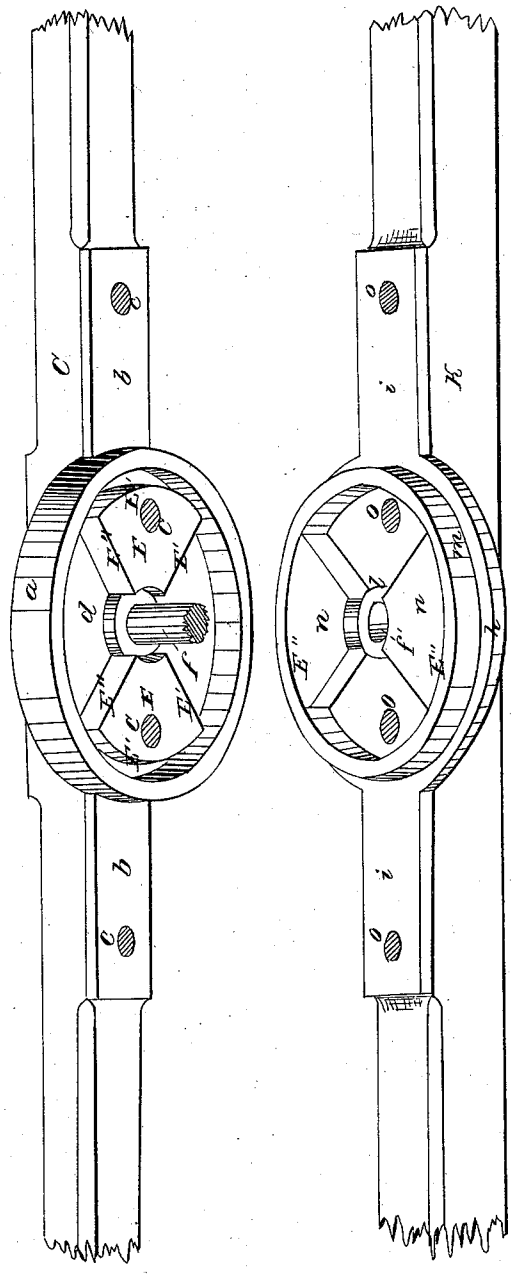
J. BARNES.

Whiffletree.

No. 7,422. Patented June 11, 1850.



UNITED STATES PATENT OFFICE.

JAMES BARNES, OF FRANKLIN, NEW YORK.

CONNECTING WHIFFLETREES WITH CARRIAGES.

Specification of Letters Patent No. 7,422, dated June 11, 1850.

To all whom it may concern:

Be it known that I, JAMES BARNES, of Franklin, in the county of Delaware and State of New York, have invented an Improvement in the Coupling of Whiffle-Trees to Carriages; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification.

The nature of my invention consists in so connecting the whiffle trees to a carriage that, although I allow the required freedom of motion I am enabled to guard against the danger which usually results from a trace breaking or becoming unhitched, viz., the end of the whiffle tree to which a trace remains attached is drawn forward so far as to permit the horse to draw out of the shafts; and the contact with his legs also causes fright. By my improvement the whiffle tree retains its appropriate position when only one trace remains attached to it.

I am aware that this result has been attained by several means, but they have all lacked those essentials which would secure their introduction into general use, and which mine possesses in an eminent degree, neatness, compactness, and strength.

I construct of iron or other suitable metal, a circular box of about the size shown at (*a*) having projections (*b*) by means of which it may be bolted firmly to the whiffle-tree (C). In the center of this box there rises from the bottom, to one half the height of the box, a small circular plate (*d*), within the box and opposite to each other, are blocks of metal of the form shown at (E) the sides of which, (E′), are radii, while the arc (E″) is somewhat less than one fourth of a circle. The blocks rise to the top of the inside of the box, but do not extend quite to its outer edge, as shown. Through the center of the box a hole is made through which a bolt (*f*) may be put. The box thus constructed is firmly secured to the under side of the whiffle-tree by suitable bolts or screws as at (*c*, *c*, *c*, *c*,). I make also of like material with the box (*a*), a follower (*h*), having projections (*i*), by means of which it may be secured by screws or bolts (*o*, *o*, *o*, *o*,) firmly to the cross-bar (K) of the shafts of a carriage. In the center of this is a circular plate (*l*), of the same form and size as that shown at (*d*), and having a hole (*f*′) through which the bolt (*f*) may be passed. On (*h*) is a flange (*m*) near the edge, rising to a height corresponding with the interior of the box (*a*). There are also blocks of metal (*n*) of the same size and form as those shown at (E) but these are so placed as to play into the spaces between those on the box (*a*) as clearly shown. It will thus be seen that the follower (*h*) will fit into the box (*a*) with only this exception, that as the arc (E″) of the blocks is described as being "somewhat less than one fourth of a circle" the play of the follower within the box will be double the amount that the arc (E″) is less than one fourth of the circle—and the operation of my invention will then be as follows:

The box and follower, bolted as described (the one to the whiffle-tree and the other to the cross-bar) being put together, the bolt (*f*) is passed through from the top of the whiffle-tree to the under side of the bar where it is secured by the usual nut. If now a trace be attached to but one end of the whiffle-tree, that end can be drawn forward only so far as will bring sides of the blocks in the box into contact with sides of those on the follower. This is arranged to be of any desired distance which will permit sufficient motion for ease to the horse and yet be perfectly consistent with safety. The flange (*m*) protects the interior from the admission of dirt, and retains the oil.

What I claim as of my own invention and which I desire to secure by Letters Patent of the United States is—

The stops or blocks (E, E,) cast upon or otherwise affixed to the box (*a*), and the stops or blocks (*n*, *n*,) cast upon or affixed to the follower (*h*) in such manner that when the two are joined by a central bolt passing through they will interlock and form a stop coupling, secure from disarrangement from external causes, the whole being constructed substantially in the manner herein described.

JAMES BARNES.

Witnesses:

ROBERT S. HUGHSTON,

SAMUEL NORTH.