

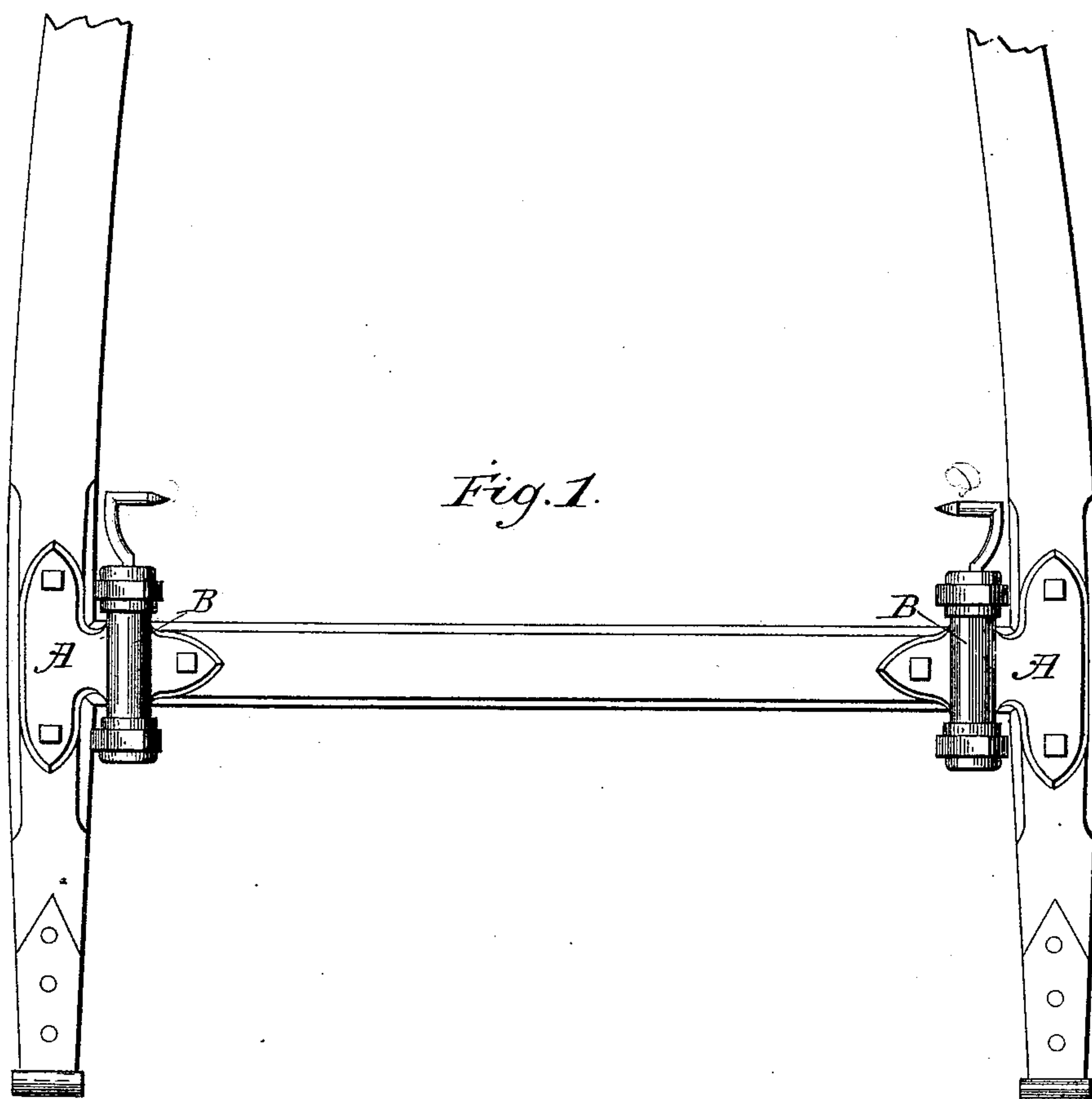
(No Model.)

G. HEON.

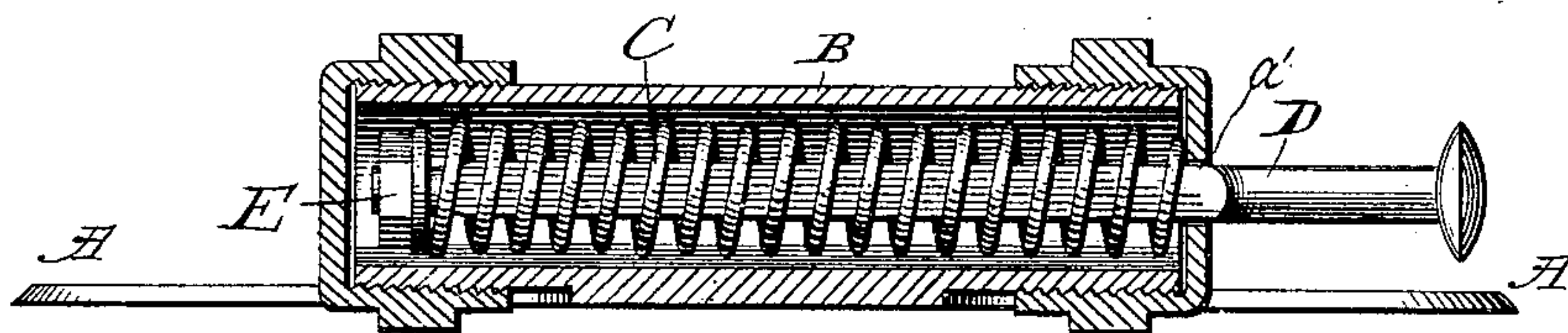
DRAFT HOOK FOR VEHICLES.

No. 353,942.

Patented Dec. 7, 1886.



*Fig. 1.*



*Fig. 2.*

Witnesses:

R. O. Wood

Saml Coopers

Inventor:

George Heon

# UNITED STATES PATENT OFFICE.

GEORGE HEON, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF TO ROSTO O. WOOD AND JULIA B. WOOD, BOTH OF SAME PLACE.

## DRAFT-HOOK FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 353,942, dated December 7, 1886.

Application filed August 19, 1886. Serial No. 211,324. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE HEON, of Manchester, county of Hillsborough, and State of New Hampshire, have invented a new and useful Improvement in Draft-Hooks for Vehicles; and I do hereby declare the following to be a full and exact description thereof, to wit:

The nature of my invention consists in attaching to a T-brace above, below, or through the cross-bar, near its junction with the thill, a hollow tube, within which is a spiral spring surrounding the draw-bar, to which the tug or other connection to the harness is to be attached, thereby dispensing with the whiffletree now in common use.

To enable others skilled in mechanical art to make and use my invention, I will proceed to describe its construction and operation by reference to the drawings, in which—

Figure 1 is a plan view, and Fig. 2 a sectional view, of my device.

A represents a T-brace, usually found applied at the junction of the cross bar with the thill of a sleigh or buggy.

B represents a tube, which may be cylindrical or otherwise, capped at either or both ends.

C is a spiral spring to be placed within the tube B, for purposes hereinafter explained.

D is a draw-bar provided with nut E posteriorly and a hook anteriorly, to which the tug is attached.

Place the spiral spring within the tube, and through which slide the draw-bar D, first passing it through the screw-cap at *a'*. Now place the nut E on the draw-bar posteriorly and the screw-cap on the tube, and it is ready to be fastened to the cross-bar of the carriage.

For convenience and cheapness of manufacture it is designed to have the tube B and T-brace A cast in one piece of malleable iron or other suitable material, for utility and durability.

The spring C is used for evenness of tension of draft, and though a rubber spring may be substituted for the spiral, it is believed to be less practical for use with this device.

The nut E is to be of steel or chilled iron, and its anterior surface will be provided with a cup-shaped flange, within which to receive the end of the spiral spring, thereby preventing the wear of the spring within the barrel or tube. This will further be prevented by allowing the draw-bar to exactly fill the space within the spiral spring.

The combined draw bar with spring may be placed in a recess within or through the cross-bar near its junction with the thill, either with or without the metallic tube, without materially changing the character of this invention for the purpose for which it is designed.

I am aware that tubular spring-cases are old, and that a tubular case containing spiral spring, with tug holder attached, has been devised and attached to a thill or end of a whiffletree for draft purposes. In the one case the tubular case was fastened to a thill and the tug attached to a hook working in a slot anteriorly through the tube or case, and being in constant danger of being filled with mud or other substance to interfere with the free action of the spiral spring within. In the other case the tubular case containing spiral spring with draw-bar was an attachment to a whiffletree, and increasing the weight and expense thereof without materially adding to its utility and practicability.

My invention evades every objection against the above-cited inventions, and I do not claim any such devices.

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

1. The combination of draw-bar D, nut E, spring C, tube A, and T-brace, substantially as herein described and set forth.

2. The combination of draw-bar D, nut E, spring C, tube A, and T-brace with the thills and cross bar of a vehicle, in the manner and for the purposes substantially as herein described.

GEORGE HEON.

Witnesses:

R. O. WOOD,  
JOHN H. ANDREWS.