A. J. SPRAGUE.

Whiffletrees.

No. 140,170. Patented June 24, 1873.

FIG. 1

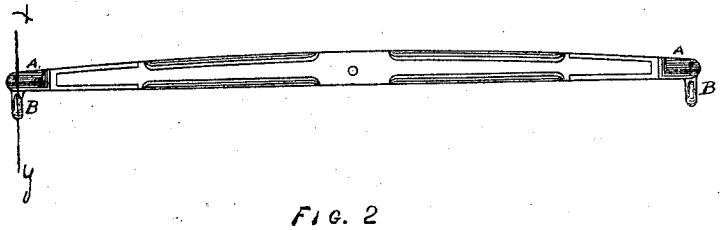

FIG. 2

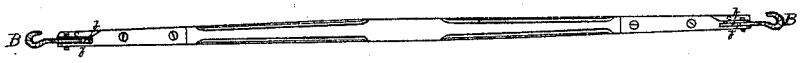

FIG. 3

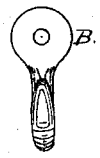

FIG. 4

WITNESSES.

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ALBERT J. SPRAGUE, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **140,170**, dated June 24, 1873; application filed March 10, 1873.

To all whom it may concern:

Be it known that I, ALBERT J. SPRAGUE, of Binghamton, in the county of Broome and State of New York, have invented certain Improvements in the Mode of Attaching Whiffletrees to Eveners or Double-Trees, of which the following is a specification:

My invention relates to a device consisting of a yoke and hook attached to the ends of the double-tree, in such a manner that when the vehicle is in use the connections shall be effectually prevented from detachment, the object of the invention being the construction of a simple device that may be readily attached and detached, and depended upon when in use.

Figure 1 in the accompanying drawing is a double-tree embodying my invention, showing the hooks in position for use. Fig. 2 is an elevation of the back of the same, showing the hooks in position for the detachment of the whiffletree. Fig. 3 is the hook detached from the yoke. Fig. 4 is a vertical section taken on the line *x y*, Fig. 1.

A is the yoke. That part which is attached to the end of the double-tree may be made in any of the usual forms. The outer end has a horizontal slot, *a*, with semicircular lips *b b*. The front part of the upper lip is provided with a flange or guard, *c*, which protects the whiffletree from detachment when in use. B is the hook, the pivoted end of which works in the slot *a*. The hole for the pivot is made back from the center of the semicircular lips *b* to allow the point of the hook to work eccentrically with the said semicircular lip, so that the throw of the point of the hook shall be sufficient to admit of the attachment and detachment of the whiffletree, and to close on the guard *c* when in use.

The whiffletree is attached by moving back the hook B for the reception of the ring, when it is moved to its position in front of the guard *c*, which effectually prevents it from detachment while the vehicle is in motion.

I do not claim, broadly, pivoting the hooks B to the evener so that they shall vibrate in the same horizontal plane, as that is an old feature; but I do not know of any construction in which the pivot is eccentric to the curved end of the double-tree, and this is believed to be a decided improvement, as it brings the point of the hook so close to the front face or edge of the evener, when the parts are in a working position, as in Figs. 1 and 4, that the whiffletree cannot be readily detached; but when the hook is in the position shown in Fig. 2 the whiffletree can be connected or disconnected without difficulty.

So, also, I regard the fender or guard *c* as being important, whether the hook be pivoted eccentrically or not, because when the parts are in substantially the position shown in Fig. 2 the staple or eye of the whiffletree can be easily passed over the hook, the upper surface of the yoke A being below the point of the hook, but when the hook is swung around into working position, as at Figs. 1 and 4, the guard projects above the point of the hook, and thus effectually prevents the escape of the whiffletree, as will be understood without further explanation.

I claim as my invention—

1. In combination with the evener having its end rounded, the hook B pivoted eccentrically to the rounded end so that when the parts are in a working position the point of the hook shall be nearer the edge of the evener than when the hook is swung outward to receive the whiffletree, substantially as set forth.

2. In combination with the evener and the pivoted hook B the guard *c*, arranged to operate substantially as set forth.

ALBERT J. SPRAGUE.

Witnesses:

GEO. M. RICKS,

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