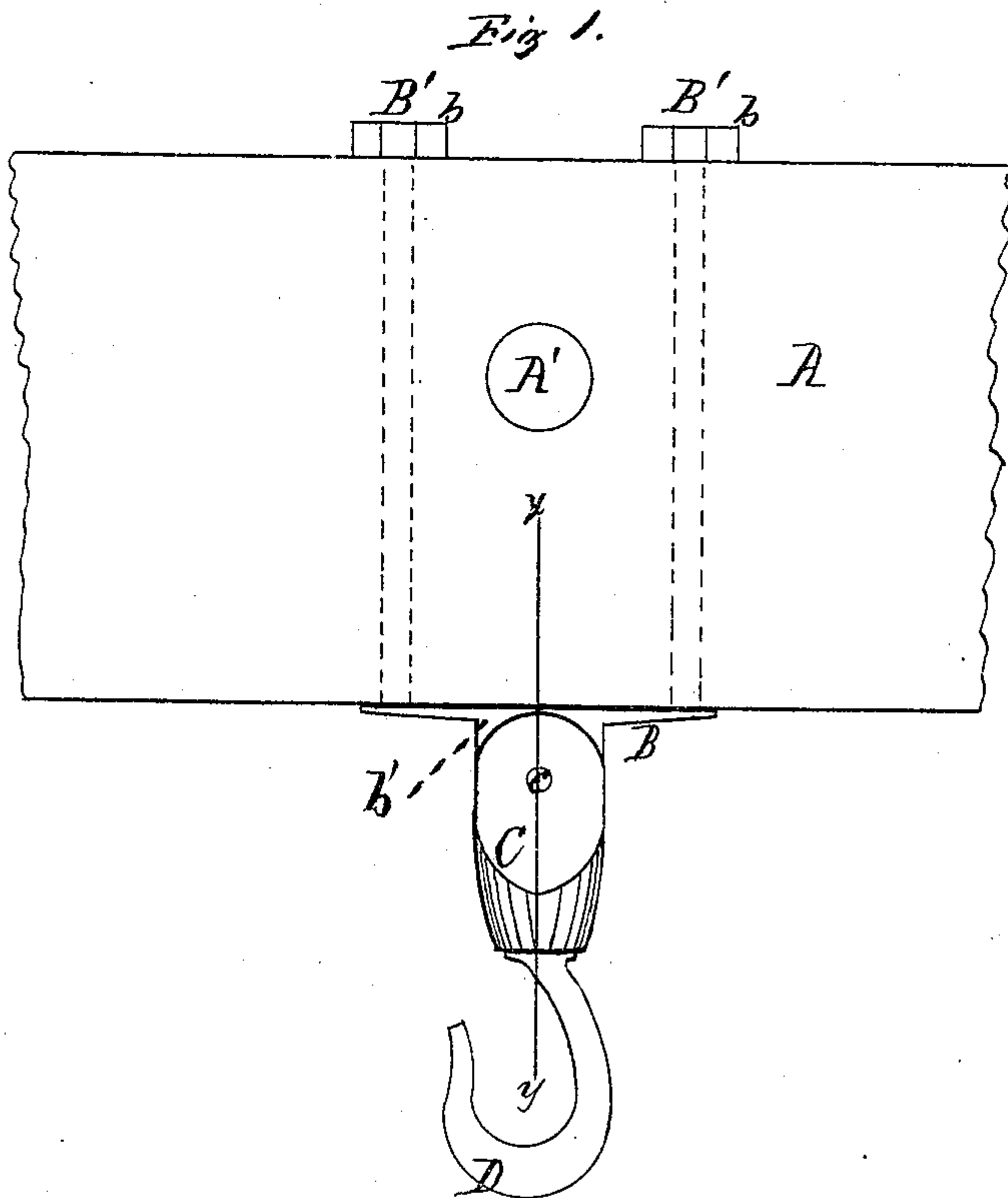


H. L. BOWEN.

Improvement in Doubletrees.

No. 132,048.

Patented Oct. 8, 1872.



Witnesses

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UNITED STATES PATENT OFFICE.

HOMER L. BOWEN, OF BELVIDERE, ILLINOIS.

IMPROVEMENT IN DOUBLE-TREES.

Specification forming part of Letters Patent No. **132,048**, dated October 8, 1872.

To all whom it may concern:

Be it known that I, HOMER L. BOWEN, of Belvidere, county of Boone, State of Illinois, have invented certain new and useful Improvements in Eveners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a plan view of my improved evener, and Fig. 2 is a vertical section of the pivoted swiveling-hook taken through line *x y*, Fig. 1.

Similar letters of reference denote corresponding parts in both figures.

It is well known to teamsters and others who are in the habit of working teams, that occasions frequently arise when it is desirable to detach the whiffletrees from the wagon and connect them to a plow, or harrow, or the tongue of another wagon. With the ordinary construction of parts this transfer involves the necessity of the employment of one or more additional clevises, which is found in practice to be inconvenient and objectionable for many reasons.

In order to obviate the difficulties incident to the employment of supplemental loose clevises, eveners have been constructed with a clevis permanently bolted thereto, said clevis having a hook swiveled in the rear or closed end; but this construction, though operating satisfactorily when used for plowing and similar purposes, has been found to be attended with some difficulties when applied to a wagon, as follows: It is apparent that the hole for the hammer-bolt must be far enough from the bolt which secures the clevis to the evener to permit the necessary vibration of the evener, thus requiring a corresponding additional length of tongue. Another objection is found in the fact that the evener, instead of resting upon the broad flat surface of the tongue, is supported on the narrow leg of the clevis, and is therefore constantly see-sawing, particularly in case the driver is in the habit of stepping on the end of the evener in getting on and off from his wagon; and, further, the constant horizontal vibration upon the narrow leg of the clevis soon wears the wood

away to such an extent as to materially weaken it at the very point where it should be strongest. Again, as the end of the hammer-strap must be raised enough higher to allow for the increase in the thickness, the thickness of both legs of the clevis having been added to that of the evener, the strap is frequently tilted up at such an inclination that the bolt cannot be inserted.

In order to remedy the difficulties above recited and to construct an evener which shall meet the various conditions required, I have made this invention, which consists in combining a draft-hook with an evener by means of a swiveled vibrating joint, and a rigid shank projecting from the rear edge of the evener-bar, and arranged about centrally thereof, as will be hereinafter fully explained.

In the drawing, A represents the evener-bar, which is provided with the usual hole A' for the reception of the hammer-bolt. B B' is a draw-head, consisting of a head and two legs or prongs, which pass through the central portion of bar A and are secured by means of nuts *b*. The head B is expanded into a flat shank, *b'*, extending rearward in the same horizontal plane with legs B' B'. C is a socket-piece, pivoted to the shank *b'*, at *c*. D is the draft-hook, swiveled in socket-piece C by means of the head *d* in such manner as to rotate freely therein. The construction and arrangement of the swivel and pivot joint are clearly shown in Fig. 2.

From an inspection of the drawing it will be readily seen that when my evener is used with a plow or for any similar purpose the swivel-joint at *d* and the pivot at *c* permit all of the movements that can be required of it; in fact, the pivot will allow greater range of vibration without undue strain upon the parts than could be provided for by any practicable arrangement of clevis.

When the evener is to be applied to a wagon the ordinary hammer-strap and hammer-bolt can be used, as the hook D can be swung against the side of the bar, and will be therefore entirely out of the way. The hook and connecting device can be applied to an ordinary evener-bar without making any change in the length of the tongue, in the

shape or size of either the hammer-bolt or hammer-strap, and without disturbing the proper support of the evener upon the pole.

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

The combination of the evener-bar A, the draw-head B B' B', the socket-piece C, and

the swiveling hook D, substantially as described.

This specification signed and witnessed this 4th day of June, 1872.

HOMER L. BOWEN.

Witnesses:

G. W. FORD,

W. L. QUIGLEY.