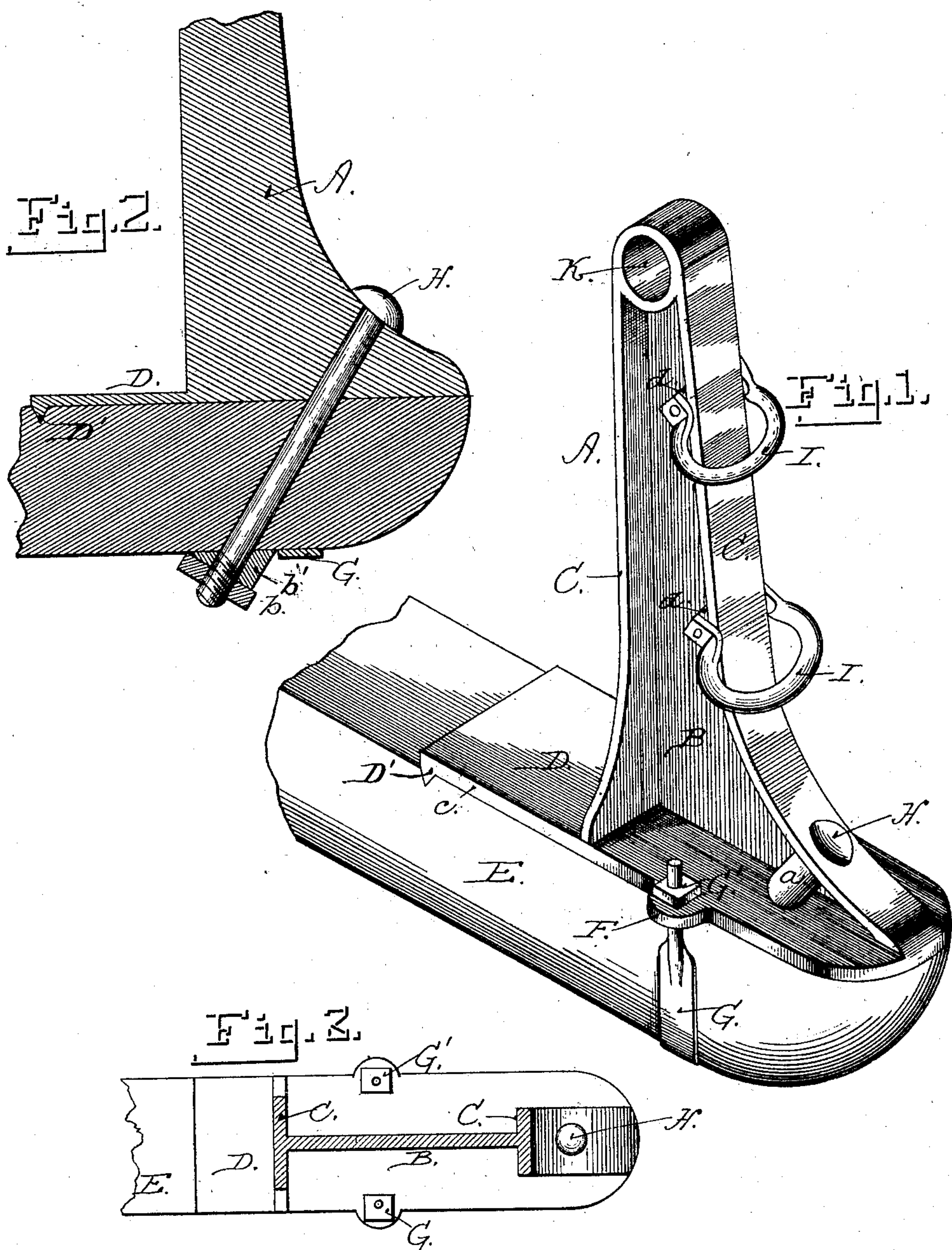


(No Model.)

F. WILLE.  
WAGON BOLSTER STAKE.

No. 363,710.

Patented May 24, 1887.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FREDERICK WILLE, OF CLERMONT, IOWA.

## WAGON-BOLSTER STAKE.

SPECIFICATION forming part of Letters Patent No. 363,710, dated May 24, 1887.

Application filed January 29, 1887. Serial No. 225,902. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK WILLE, a citizen of the United States, residing at Clermont, in the county of Fayette and State of Iowa, have invented certain new and useful Improvements in Wagon-Bolster Stakes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the construction of wagon-bolster stakes, the object being to provide a stake which shall combine strength with lightness of material, capability of resisting great strain, and which can be produced at a reduced cost.

To these ends my improvements consist, essentially, of a stake formed of malleable iron having strengthening ribs or flanges formed integral with a supporting-plate arranged at right angles thereto and provided with a suitable clip and diagonally-projecting bolt for securing the completed device to the bolster of a wagon, all as will be hereinafter fully described, and specifically designated in the claim.

In the accompanying drawings, Figure 1 represents a perspective view of my complete device, and Figs. 2 and 3 detail sectional views of the same.

Similar letters of reference indicate like parts in the several figures of the drawings.

In carrying out my invention the stake A is preferably made of malleable iron or pressed steel, the upright central portion, B, of which is comparatively thin and tapering toward the top, and provided upon the edges thereof with a strengthening-flange, C, which projects outwardly at right angles on each side of the upright portion B, as shown, the said stake being formed integral with a supporting plate or base, D, arranged at right angles thereto, and adapted to snugly fit and conform to the upper outer surface of the wagon-bolster E.

Suitable lugs, F, are cast upon each side of the base-plate D, and are provided with openings through which pass the upper screw-threaded ends of the clip G, which encircles the outer end of the bolster, and is held in place by the screw-taps G'. A diagonally-arranged projection, a, upon the lower outer

end of the stake and its supporting-base D, is provided for the reception of a screw-bolt, H, which passes through the same and through the bolster E on an incline upward, to hold the parts securely together, a screw-tap, b, being provided upon the lower end of the said bolt, and between the screw-tap b and the bolster E a wedge-shaped bearing-block, b', is inserted to form an even bearing-surface for the tap b, whereby the binding force of bolt H is fully exerted to hold the stake from outward horizontal displacement, as fully shown in Fig. 2.

The supporting plate or base D projects inwardly for a short distance from the upright B upon the bolster E, to form a wear-plate, c, for the lower edges of the wagon-body to rest upon, and its inner end terminates in a downward-projecting beveled edge, which is inserted into the bolster E, to form a grip and aid in preventing outward movement of plate D.

At suitable distances apart upon the outer edge of the stake A are provided lugs d for the pivotal connection with said stake of the usual rings or loops, I, for the reception or additional high stakes, when found necessary or desirable. The usual ring, K, is formed in the upper end of the stake and strengthened by the surrounding flange C.

By means of my improvements I am enabled to provide a wagon-bolster stake which is strong, light, and durable, and which can be produced at a much less cost than devices hitherto used for the same purpose, the diagonally-arranged bolt and surrounding clip serving to securely hold the parts together to effectually resist all lateral strain upon the stake.

Having thus described my invention, I claim as new and useful—

A wagon-bolster stake consisting of the thin malleable-iron body B and integral base D, having inner edge beveled downward, the body B provided with a surrounding flange, C, inclosing ring K, and loops I, in combination with the inwardly-inclined fastening-bolt H, the tap b, the intermediate bearing-wedge, b', the binding-clip G, and the bolster E, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK WILLE.

Witnesses:

PAUL ELLINGS,  
C. F. BECKER.