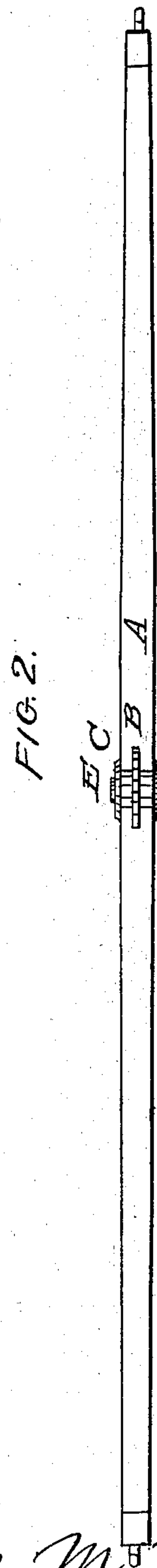
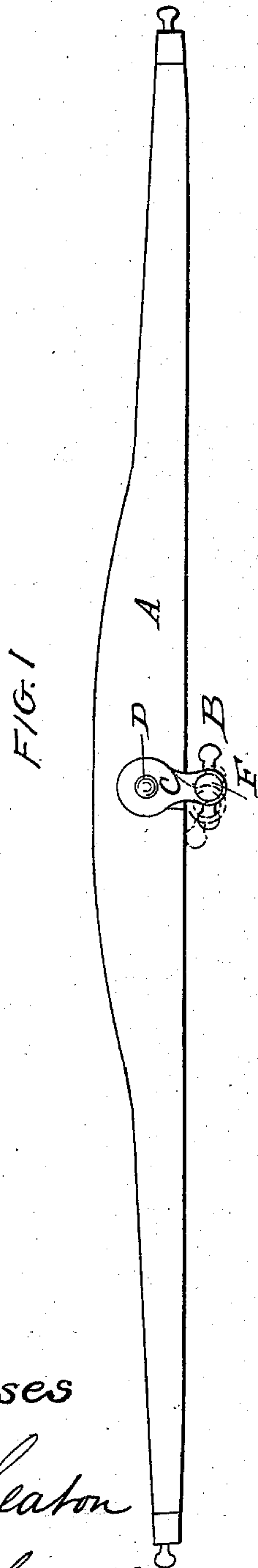


M. V. B. WILLIAMSON.

Doubletree.

No. 74,471.

Patented Feb. 11, 1868.



Witnesses
R. H. Seaton
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Inventor
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By How & Weston Attys

United States Patent Office.

M. V. B. WILLIAMSON, OF JAMESPORT, NEW YORK.

Letters Patent No. 74,471, dated February 11, 1868.

IMPROVEMENT IN DOUBLE-TREES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, M. V. B. WILLIAMSON, of Jamesport, in the county of Suffolk, and State of New York, have invented certain Improvements in Double-Trees; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of the combination with a double-tree of a short single-tree or centre-bar, said double-tree being so constructed as to receive the outside tugs, and said single-tree being so constructed as to receive the inside tugs, and also in attaching the said single-tree to the said double-tree by means of a clevis, the said single-tree being capable of swinging on the bolt or rod, by which it is attached to said clevis, and the forward end of the said clevis being capable of swinging to the right or left, so as to approach or recede from either of the ends of the double-tree, in order to preserve an equal strain on each of the traces of each horse, and to secure a direct and steady draught from the centre of the double-tree.

The object sought to be gained is to dispense with the cumbersome, expensive, and inelegant gearing which is now used, consisting of a double-tree and single-trees combined, and at the same time to secure a direct, steady, and equalized strain on the traces in the act of drawing the vehicle or other article to which the horses are attached. In the accompanying drawings—

Figure 1 is a top view of a double-tree, embodying with its attachments my invention.

Figure 2 is a front view of the same.

A is the double-tree, which is made long enough to allow the outside traces to be hitched to its ends. B is the centre-bar, to which the inside traces are attached. C is the clevis, attached to the double-tree A by the bolt D. The centre-bar B is secured to the said clevis by means of the bolt or rod E, which passes through the clevis and through the said centre-bar. *a a* are thick washers or rings, which hold the centre-bar B in its place, in the middle, between the ends of the clevis, and keep it steady. The clevis C may be extended back, and provided with a hook or link, to hook on to cars or other objects which are unprovided with tongues or poles. The position which the parts assume when one or both horses move or draw to one side, as in turning, is shown in red lines in fig. 1. When one horse draws ahead of the other, the centre-bar B turns on its centre, and the corresponding end of the double-tree advances, preserving the equality and directness of the strain on each of the four traces, thus making the pressure come equally hard on each side of the collar, and preventing chafing.

Another advantage which this invention possesses over those now in general use is, that it is very still in its operation, and is never liable to catch and chafe upon itself in its movements.

I claim the combination with a double-tree, A, of a short single-tree or centre-bar, B, capable of swinging on its centre, and attached to the double-tree by means of a clevis, or its equivalent, substantially as and for the purpose set forth.

I also claim the combination of the double-tree A with the single-tree B, substantially as set forth.

M. V. B. WILLIAMSON.

Witnesses:

R. H. SEATON,

H. JAMES WESTON.