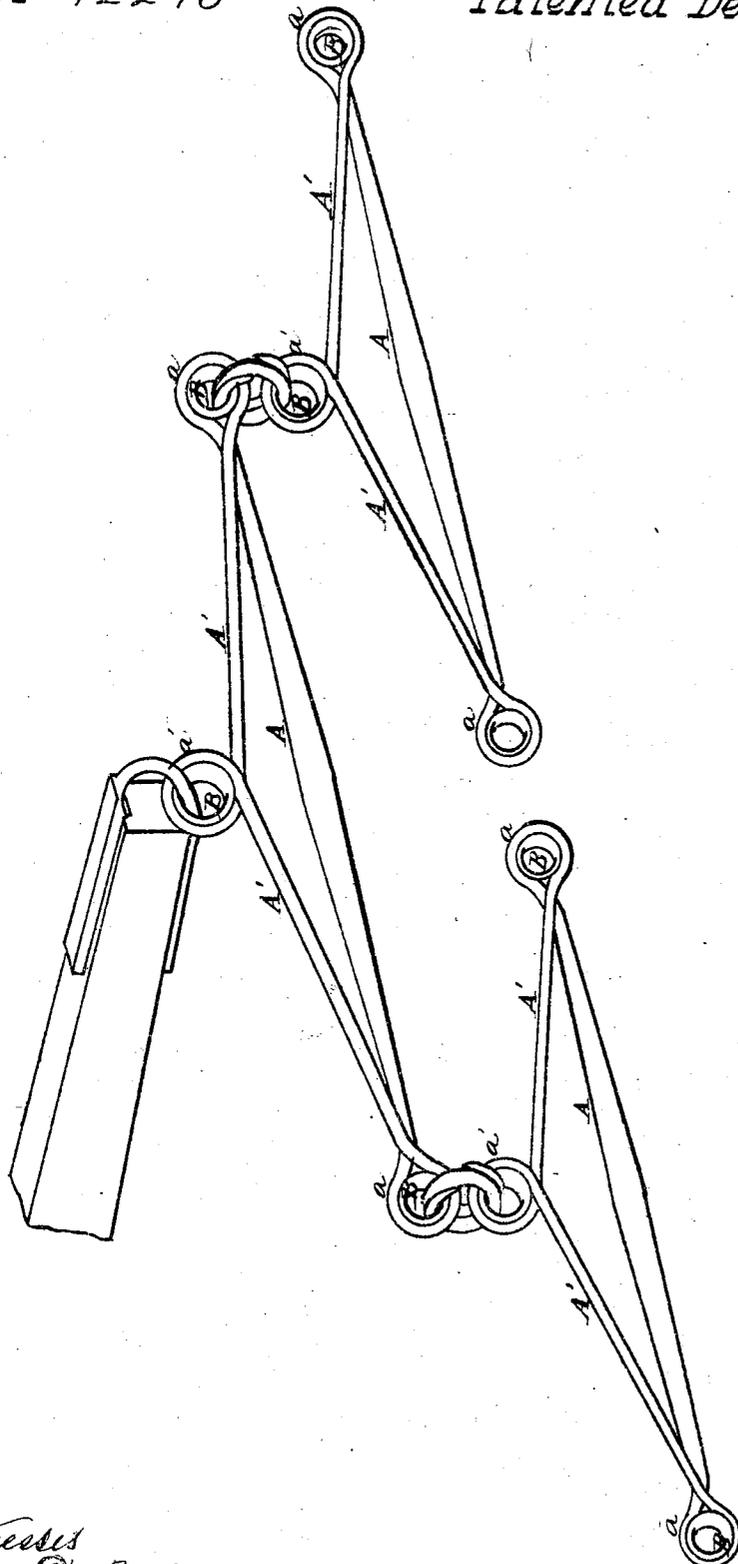


G. Watt.

Whiffle-Trees.

N^o 72248

Patented Dec. 17, 1867.



Witnesses
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GEORGE WATT, OF RICHMOND, VIRGINIA.

Letters Patent No. 72,248, dated December 17, 1867.

IMPROVEMENT IN WHIFFLE-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, GEORGE WATT, of Richmond, in the county of Henrico, and State of Virginia, have invented a new and useful Improvement in Whiffle-Trees; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which are made a part of this specification.

The subject of the present invention is a whiffle-tree, made of rod-iron, bent into triangular shape.

The improvements consist, first, in forming the three sides of the whiffle-tree straight, in order to give it strength and rigidity; second, in giving increased thickness or body to the longest side of the whiffle-tree, the better to enable it to sustain endwise pressure or force; third, in providing the attaching-loops of the whiffle-tree with replaceable thimbles or eyes, to sustain the wear, and relieve the whiffle-tree of the same.

The drawing is a perspective view of a set of whiffle-trees, illustrating my invention.

A A' A' represent a whiffle-tree, made by bending rod-iron so as to form a triangle having three straight sides, united by the loops *a a' a'*. The middle loop *a'* is for the attachment of the whiffle-tree to a plough or wagon directly, or to a double-tree, as shown, the attachment being effected by means of a hook, clevis, bolt, or otherwise. In like manner, the end loops *aa* are for the attachment of the traces. B B B are rings or thimbles of cast or wrought iron, or other material, having circumferential grooves in their peripheries. These thimbles are fixed within the loops *a a' a'*, so as to be tightly embraced thereby. They may be placed within the loops when the iron forming the whiffle-tree is hot, so that they shall be tightly clamped by shrinkage. Said thimbles form eyes for the attaching-loops of the whiffle-tree, and serve, by sustaining the wear, to increase the durability of the whiffle-tree and enhance its value. They may be readily replaced when worn. The longest side A of the whiffle-tree is made with increased thickness or body, to enable it to sustain great endwise force. The side A may be enlarged throughout its entire length, or the enlargement may be greatest at the central portion, and diminish toward the ends, thus giving that side of the whiffle-tree a tapering form. This part A of the whiffle-tree has to endure the greatest crushing force or strain, and the enlargement supplies the necessary strength and rigidity without unduly increasing the weight.

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

1. The whiffle-tree A A', formed of bent metal, with three straight sides, one of which is enlarged in the centre, to sustain endwise pressure, as described.
2. In bent-metal whiffle-trees, the replaceable rings or thimbles B, substantially as and for the purposes set forth.

GEO. WATT.

Witnesses:

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