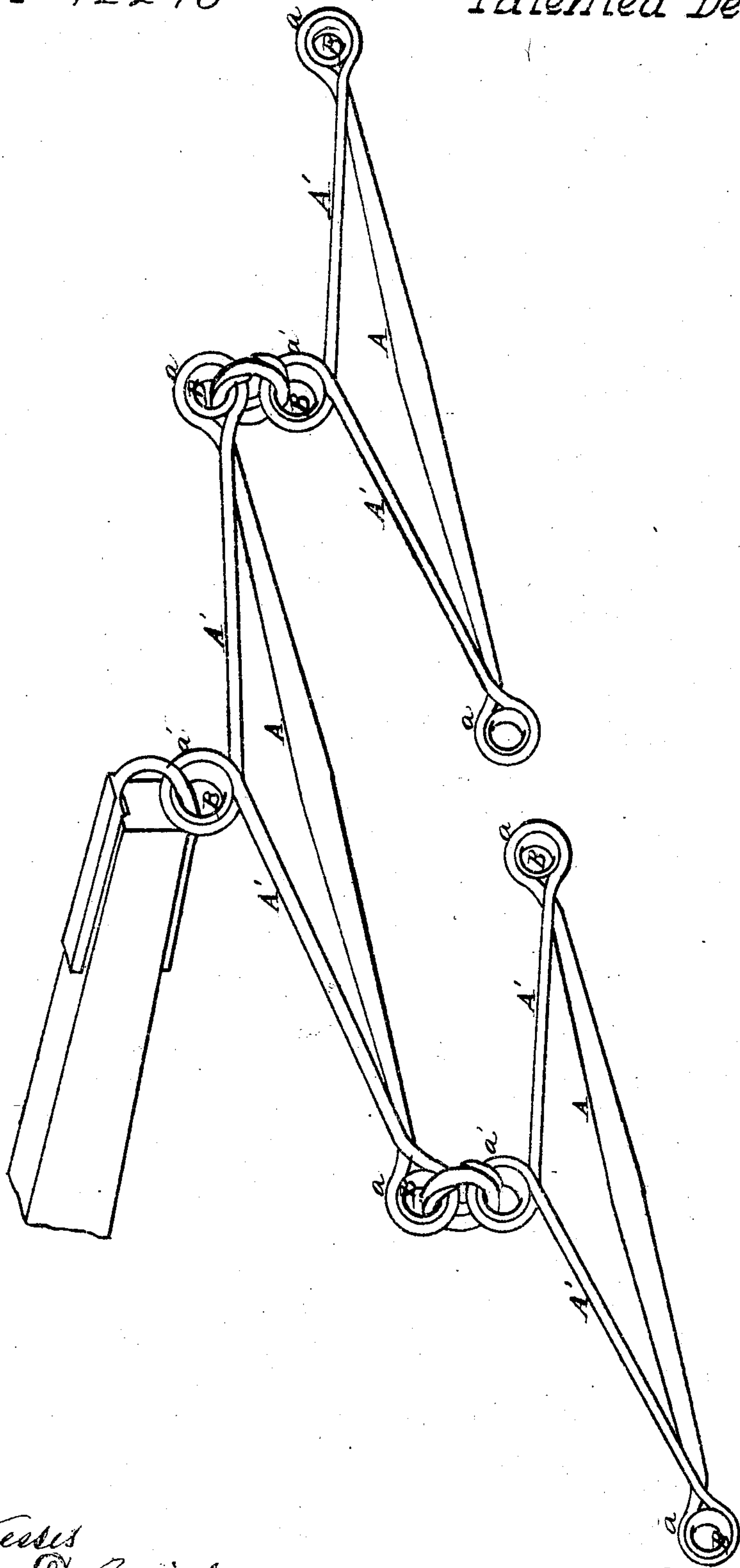


G. Watt.

Whiffle-Trees.

N^o 72248

Patented Dec. 17, 1867.



Witnesses
Chas. D. Smith
J. M. Bowler

Inventor
Geo. Watt
By Amos L. B. B.
Attorneys

United States Patent Office.

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 *a a* 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:

C. M. PLEASANTS,
R. W. HAW.