

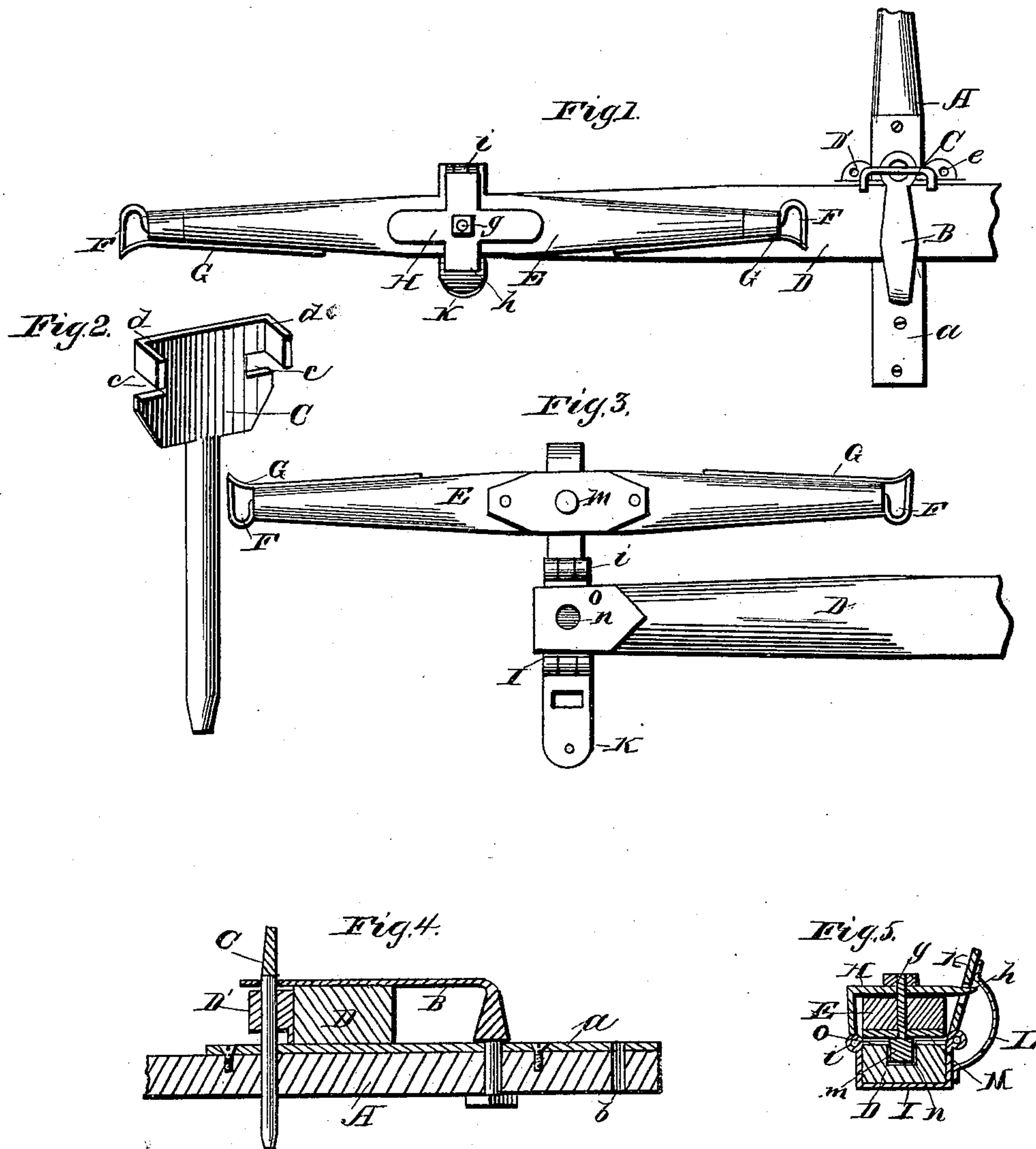
(Model.)

W. O. FOSTER.

DOUBLETREE AND TONGUE FOR VEHICLES.

No. 246,742.

Patented Sept. 6, 1881



William O. Foster,
INVENTOR.

WITNESSES

Ad. L. Dietrich,
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By his Attorneys

Louis Bagger & Co.

UNITED STATES PATENT OFFICE.

WILLIAM O. FOSTER, OF TRENTON, GEORGIA, ASSIGNOR OF THREE-FOURTHS
TO WILLIAM G. MORRISON AND JEREMIAH G. PACE, BOTH OF SAME
PLACE.

DOUBLE-TREE AND TONGUE FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 246,742, dated September 6, 1881.

Application filed June 28, 1881. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM O. FOSTER, of Trenton, in the county of Dade and State of Georgia, have invented certain new and useful
5 Improvements in Double-Trees and Tongues for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and
10 use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan or top view, showing the tongue with one-half of the double-tree and
15 its appropriate single-tree attached. Fig. 2 is a perspective view of the tongue-bolt or pintle detached. Fig. 3 represents one end of the double-tree with the single-tree in its reversed position for releasing the traces. Fig. 4 is a
20 longitudinal section through the tongue, pintle, and hammer-plate; and Fig. 5 is a cross-section through the middle of the single-tree and the hinge strap or plate by which it is secured to the double-tree.

25 Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to the running-gear of vehicles; and it consists in an improved construction and combination of parts of the
30 tongue or pole with its whiffletrees, substantially as hereinafter more fully set forth, and particularly pointed out in the claims.

In the annexed drawings, A represents the tongue, the rear end of which is covered with
35 an iron plate, *a*, through which is a series of bolt-holes, *b b*, extending vertically through the tongue.

B is the hammer-strap, the bent and nutted end of which may be inserted through any one
40 of the holes *b*, except the first, while its upper horizontal arm is of a length corresponding to the distance between the bolt-holes *b b*.

C is the tongue-bolt or pintle, the head of which is flattened and made with two notches,
45 *c c*, the wings of the flattened upper part being bent at right angles, as shown at *d d*. In this manner the bolt with its flattened head forms a convenient wrench for loosening or tighten-

ing nuts of different size in the running-gear and vehicle-body; and by adjusting the ham- 50
mer-strap and bolt C in the bolt-holes *b* the length of the tongue from its outer end to the double-tree may be regulated at will.

D is the double-tree, which has an iron bearing-plate, *D'*, bolted to its middle front part, 55
having a series of three or more apertures, *e*, for the insertion of bolt C. By shifting the bolt from the central aperture *e* to one on the right or left side of the same the draft may be equalized in cases where there is an un- 60
even pull upon the single-trees.

E is the single-tree, of which only one is shown in the drawings, inasmuch as both are of the same construction.

F F are the trace-hooks, and G G are flat 65
springs, which are secured to the back of the single-tree and extend out over its ends, so as to bear with their curved outer ends against the hooks F.

Upon the middle top part of the single-tree 70
is bolted loosely a plate, H, which has a lip, *h*, at its inner end, and is bent to form a hinge, *i*, at its outer end, connecting it with another plate, I, which is bolted rigidly to the under side of the outer end of the double-tree, and is 75
provided with a hinged latch, K, adapted to engage with the lip *h* of plate H. Below this latch is pivoted a hook, L, which, when turned into a vertical position, bears with its upper end against the latch K, and is adapted for 80
fastening the outer end of the stay-chain.

On the under side of the middle part of the single-tree E is fixed a plate, M, through which projects a stud, *m*, that fits into a bore or recess, *n*, in the end of the double-tree D, and 85
which is protected by a plate, *o*.

When it is desired to release or unhitch the traces this may be done in a moment's time by turning hook L to one side and slipping the latch K off of lip *h*, when the single-tree will 90
be reversed on its hinge *i*, as shown in Fig. 3, thus enabling the traces to slip out of the hooks F F and their springs G G. The single-tree is not rigidly affixed to its top plate, H, but turns upon the central bolt, *g*, the enlarged 95
lower end of which, passing through plate M,

forms the stud *m*, which projects down into the recess *n* in the end of the double-tree, the center bolt, *g m*, thus forming the pivot or pintle for the single-tree.

5 Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

10 1. The combination of the tongue A, having a series of bolt-holes, *b b*, at its rear end, adjustable hammer-strap B, wrench-bolt or pintle C, and double-tree D, having bearing-plate D', provided with a series of perforations, *e*, substantially as and for the purpose herein shown and described.

15 2. The double-tree D, recessed at *n* and provided with the plate I, having hinge *i* and latch K, and reversible single-tree E, having central bolt, *g m*, and hinge-plate H, provided with the lip *h*, constructed and combined substan-

tially as and for the purpose herein shown and 20 specified.

3. In combination, the double-tree D, having recess *n* and plate I, provided with the hinge *i*, latch K, and pivoted hook L, and single-tree E, having center bolt, *g m*, plate H, 25 hinged at one end to the plate I, and provided at its other end with the lip *h*, hooks F F, and springs G G, constructed and arranged to operate substantially in the manner and for the purpose herein shown and set forth. 30

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM O. FOSTER.

Witnesses:

JOHN P. JACAWAY,
ROBT. S. RODGERS.