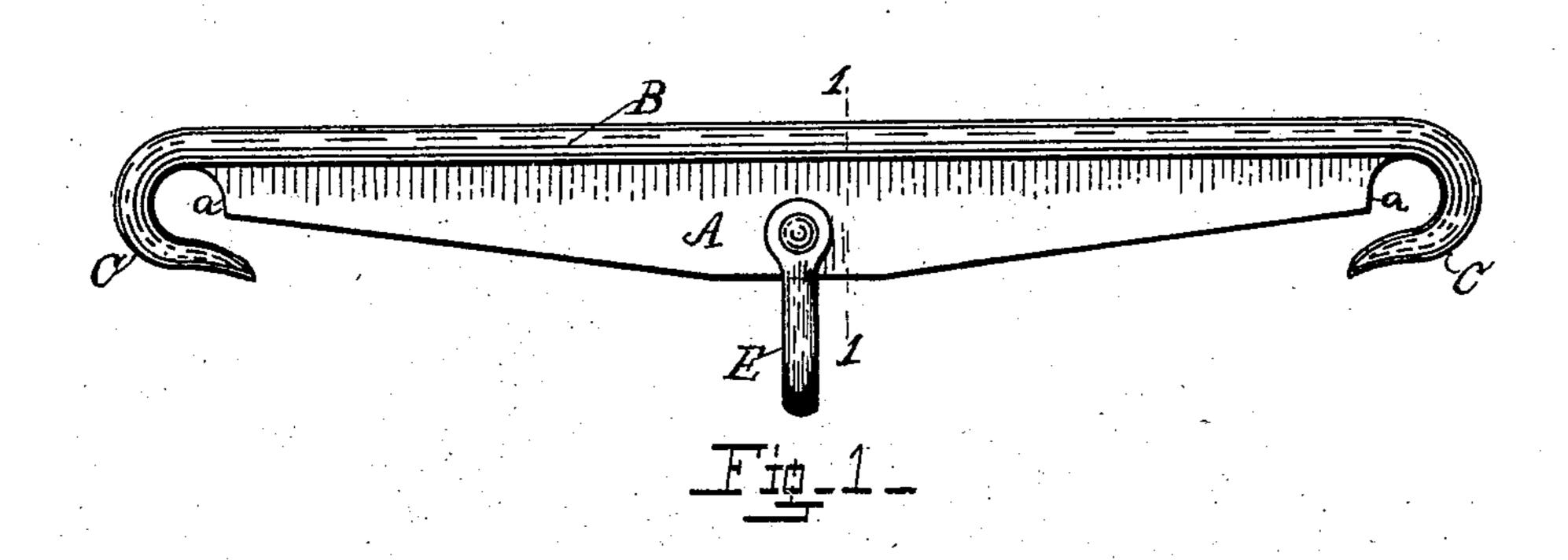
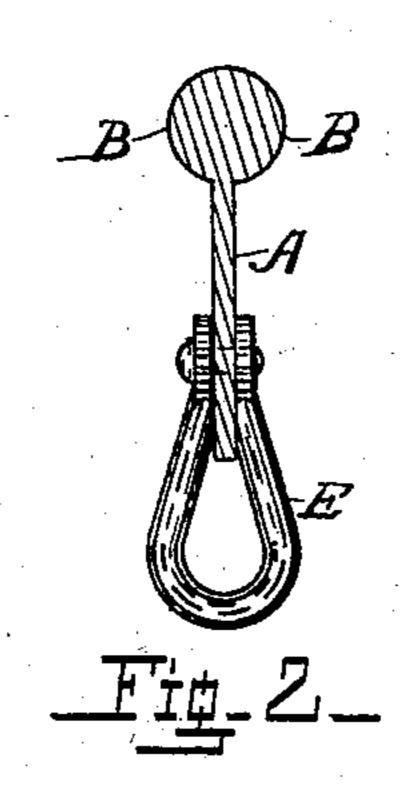
(No Model.)

E. HAIMAN. WHIFFLETREE.

No. 453,146.

Patented May 26, 1891.





Witnesses

Walter Reeves A. Flaven Juventor Filipp Hoimon

Attorney 2

United States Patent Office.

ELIAS HAIMAN, OF ATLANTA, GEORGIA.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 453,146, dated May 26, 1891.

Application filed December 24, 1890. Serial No. 375,741. (No model.)

To all whom it may concern:

Be it known that I, ELIAS HAIMAN, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Whiffletrees; and I do hereby 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 letters of reference marked thereon, which form part of this specification.

The object of this invention is the cheap production of substantial metal whiffletrees.

The invention consists of a web of metal stiffened on its front edge by ribs or flanges, top and bottom, and means for hitching the traces and of attaching it at the center.

The invention is fully shown in the accompanying drawings, and will be hereinafter described.

In the accompanying drawings, Figure 1 is a top view showing hooks formed integrally with the body of the whiffletree and a clevis for attaching it at the center. Fig. 2 shows a section on the line 1, Fig. 1, and also shows the clevis shown in Fig. 1.

In the several figures, A is a web, and B B are ribs or flanges (best shown in Fig. 2) on the top and bottom of said web. The exact form of these lateral projections is immaterial, so long as the form is convenient to manufacture and of a size that will give just sufsicient strength. The form shown, however, is believed to be best. The ribs B, forming a

bead on the front edge of the web, are extended beyond the web at the ends and bent back, forming hooks C for the traces, as shown in Fig. 1. The back edge of the flange should 40 be tapered, but only as much as will leave the shoulders a to prevent the slipping toward the center of the trace-hooks. A clevis E may be riveted or otherwise fastened to the center, as shown in Fig. 1.

The form of construction shown and herein described is equally desirable in single or
double trees, except that in doubletrees or
eveners the hooks, of whatever form, by which
the singletrees are attached should be closed. 50
The beaded edge of the whiffletree should be
the front edge thereof, as it has special advantages in such position, due to the fact that
a horse kicking it will not be cut thereby, as
would be the case were the edge left exposed. 55

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

As an improved article of manufacture, a whiffletree consisting of a web-plate A, the 60 ribs B B, secured one on each side of the front edge of the said web, the web being cut away to form the shoulders a a, and the ends of the ribs being continued beyond the web, tapered, and formed into hooks, substantially 65 as described.

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

ELIAS HAIMAN.

Witnesses:

A. P. WOOD, ALBERT A. WOOD.