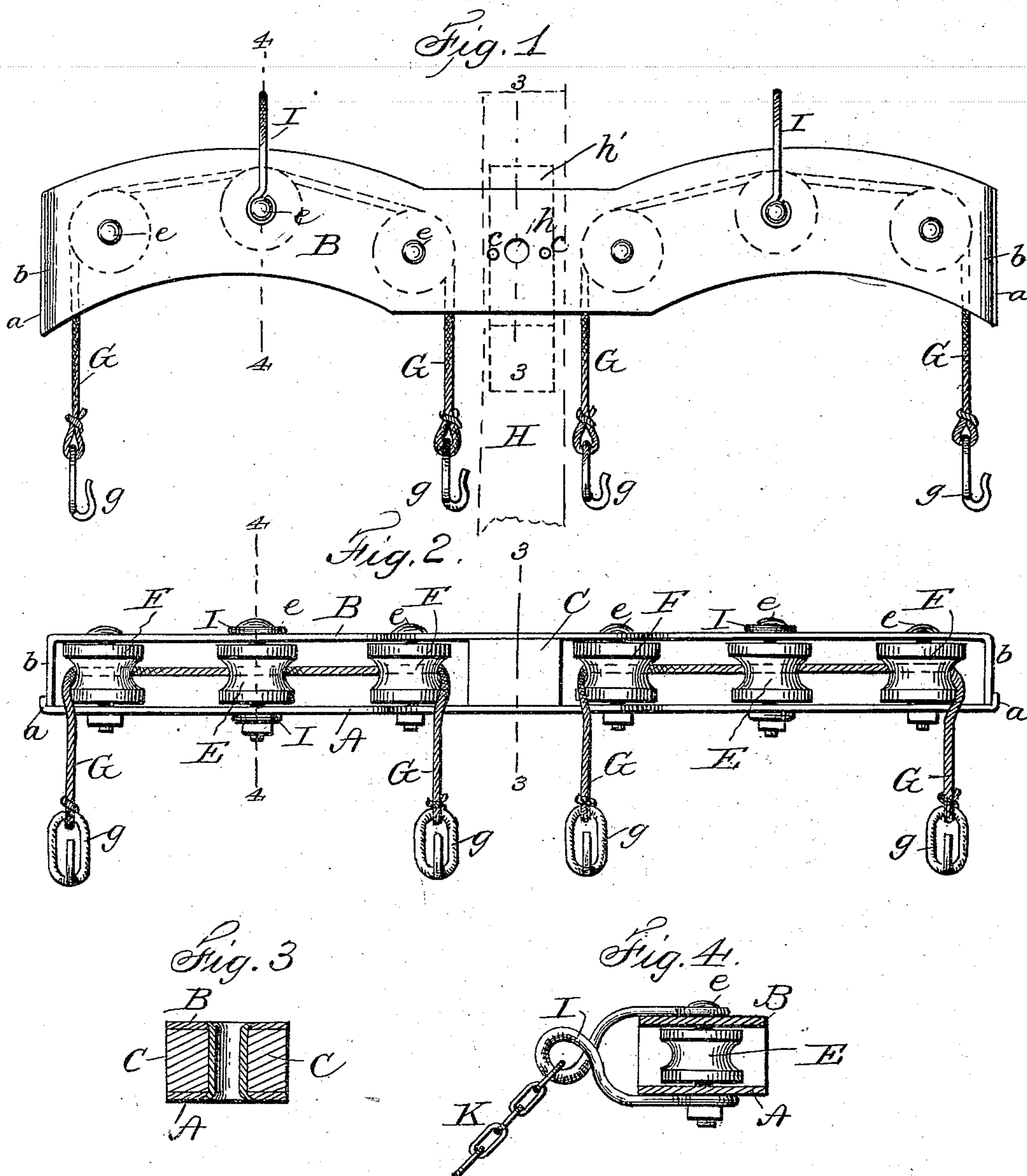


(No Model.)

J. H. MORAN.
WHIFFLETREE.

No. 553,126.

Patented Jan. 14, 1896.



WITNESSES
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JOHN H. MORAN, OF LICKING, MISSOURI.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 553,126, dated January 14, 1896.

Application filed June 26, 1895. Serial No. 554,088. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. MORAN, a citizen of the United States, residing at Licking, in the county of Texas, State of Missouri, 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.

My invention relates to improvements in whiffletrees or draft devices for vehicles and the like.

The invention will first be described in connection with the accompanying drawings, and then particularly pointed out in the claims.

In the drawings, Figure 1 is a plan view of a doubletree constructed in accordance with my invention. Fig. 2 is a front elevation of my device. Figs. 3 and 4 are transverse sectional views on the lines 3 3 and 4 4, respectively, in Figs. 1 and 2.

Referring to the drawings, A is a bottom plate, having overlapping ends *a*, and B a top plate, having downward-projecting ends *b*, said plates being preferably of steel, and having the curved form shown in Fig 1, which is what might be called "yoke-shaped." The said plates A and B are secured together and held a short distance apart by means of a central block C through which pass a pair of bolts *c* and the downward-projecting ends *b* of the plate B. In this way spaces are formed between the two plates A and B, one on each side of the central block C, and in the center of each space is revolubly mounted a central pulley E, having a vertical axis *e* and a grooved or concave periphery. At each side of each central pulley E is mounted a revoluble end pulley F. Thus it will be seen the pulleys are in sets, one set on the right-hand side of the center of the whiffletree and the other set on the left-hand side.

Around each set of pulleys is passed a chain or other flexible draft device G, having hooks *g* at each end, these hooks being arranged to receive the eyes on the ends of the traces.

The mechanism just described is secured to the tongue H in the usual manner, a pin or bolt *h* passing through the center of the plates

A and B and through the tongue, the upper end being held, if desired, by a bracket *h'*, as usual.

The pins or bolts *e* which serve as the axes of the rollers E extend above and below the plates and serve to hold the ends of clevises I to which stay-chains K are attached, these stay-chains connecting to the gear of the vehicle in any suitable way.

It will be seen that in my construction the plates A and B secured together form a double-tree, while the chains G, with their hooks *g*, serve as singletrees, the chains moving over their respective rollers in one direction or the other to equalize the draft. Furthermore, my invention allows a simple and exceedingly strong construction which is not as liable to be broken by sudden strains as the usual form of draft device.

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

1. A doubletree comprised of a pair of parallel bars having overlapping ends, the ends of the upper bar contacting with the upper surface of the lower bar and within the upward-projecting ends thereof, a block between the bars intermediate the ends, a series of rollers mounted between said bars on each side of said block and a draft chain passing around the rollers, as and for the purpose described.

2. A doubletree comprised of a lower bar having upward-projecting ends, an upper bar having downward projecting ends contacting with the lower bar within said upward projecting ends thereof, a block between the bar midway the ends, a series of rollers mounted between the bars, in sets, each side of said block a clevis pivotally mounted from the axis of the central roller of each set and a draft chain passing around each set of rollers and having a hook arranged to engage the traces, substantially as described.

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

JOHN H. MORAN.

Witnesses:

W. S. NICHAL,
FRANK MAUTZ.