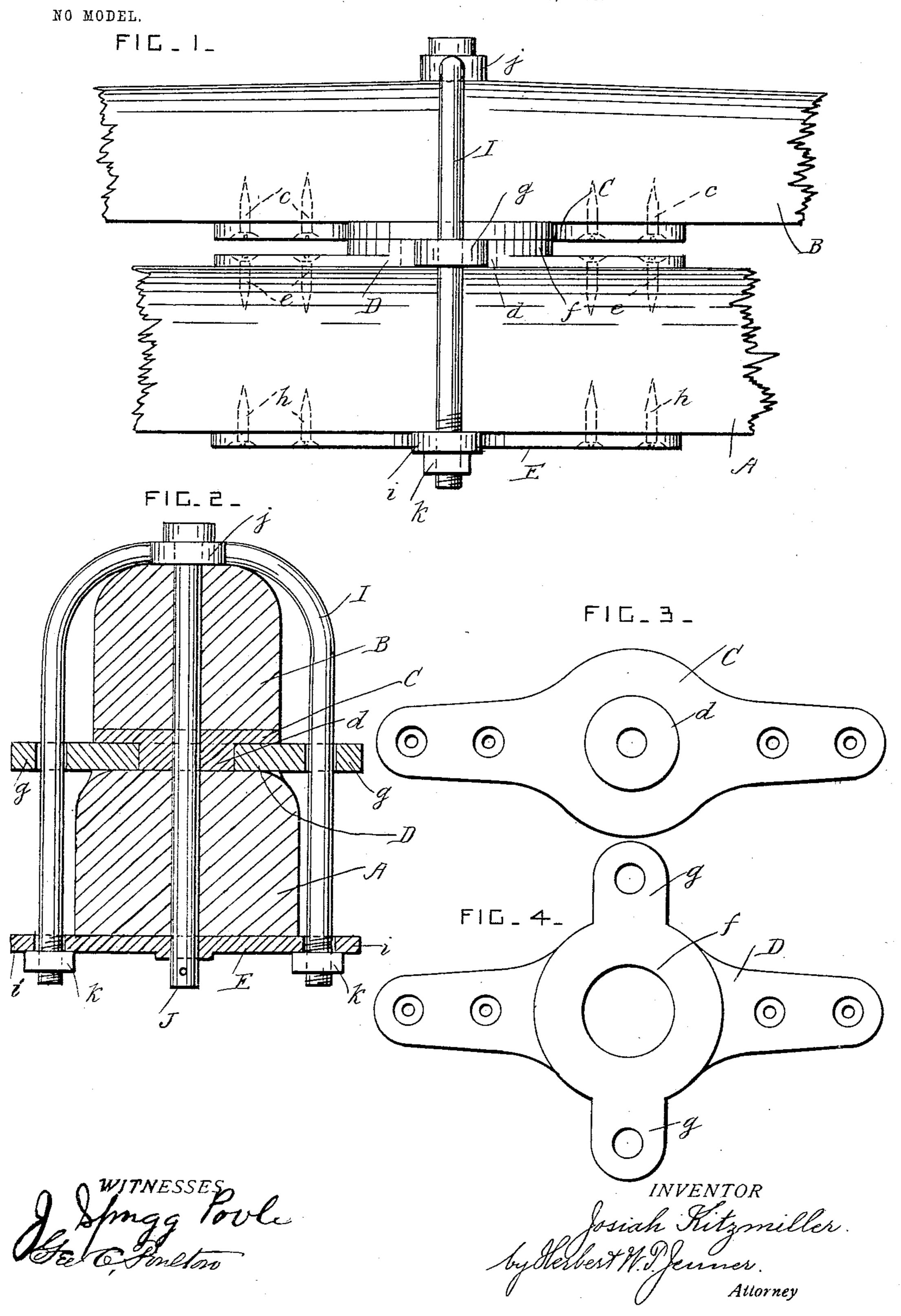
J. KITZMILLER. WHIFFLETREE.

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United States Patent Office.

JOSIAH KITZMILLER, OF SOUTH AUBURN, NEBRASKA.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 745,730, dated December 1, 1903.

Application filed January 20, 1903. Serial No. 139,772. (No model.)

To all whom it may concern:

Be it known that I, Josiah Kitzmiller, a citizen of the United States, residing at South Auburn, in the county of Nemaha and State 5 of Nebraska, 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 to which it appertains to make and use the same.

This invention relates to whiffletrees; and it consists in the novel construction and combination of the parts hereinafter fully de-15 scribed and claimed whereby the whiffletree is pivoted to the cross-bar.

In the drawings, Figure 1 is a front view of the device. Fig. 2 is a cross-section through the device. Fig. 3 is a plan view of the whif-20 fletree-plate. Fig. 4 is a plan view of the upper plate of the cross-bar.

A is a portion of a cross-bar or other simi-

lar part of a vehicle.

B is a swingletree, whiffletree, or other 25 equivalent draft device which is pivoted to the other part A.

C is a plate which is secured to the under side of the swingletree by screws c, the heads of which are countersunk into the plate. 30 The plate C is provided with a circular projection d on its under side.

D is a plate which is secured to the upper side of the cross-bar A by screws e, the heads of which are countersunk into the plate. The 35 plate D has a projecting boss f, in which the projection d is journaled, the plate C being in contact with the face of the boss f. The plate D has also two perforated lugs g, which project at the front and back of the cross-bar.

E is a plate which is secured to the under side of the cross-bar A by screws h and which has perforated lugs i, which project under the lugs g.

I is a yoke having a bearing j at its top. The arms of the yoke pass through the per- 45 forated lugs q and i and have screw-threaded lower end portions and nuts k, by which the friction between the plate C and the boss f can be regulated and adjusted.

J is a pivot-pin which passes vertically 50 through the bearing j and through bearings in

the plates C and E.

The arms of the yoke are straight, and the lugs g are free to slide on them, so that the pressure between the parts f and C can be 55 regulated by the nuts K.

The yoke straddles the swingletree, and its arms prevent the swingletree from rocking too far in each direction. This device forms a very efficient and satisfactory connection 6c between a swingletree and its cross-bar.

What I claim is—

The combination, with a cross-bar A, a plate D secured to the upper side of the cross-bar, and a plate E secured to the under side of the 65 cross-bar, each said plate having lugs provided with guide-holes; of a swingletree B, a plate C secured to the under side of the swingletree and having a projecting boss which is journaled in the plate D, a yoke having a 70 bearing which rests on the upper side of the swingletree and which has straight and parallel arms which are slidable in the said guideholes, nuts k on said arms for adjusting the pressure between the plates C and D, and a 75 central pivot-pin J passing through the said bearing and plates.

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

JOSIAH KITZMILLER.

Witnesses:

MARTIN H. WELLER, WM. OSBORN.