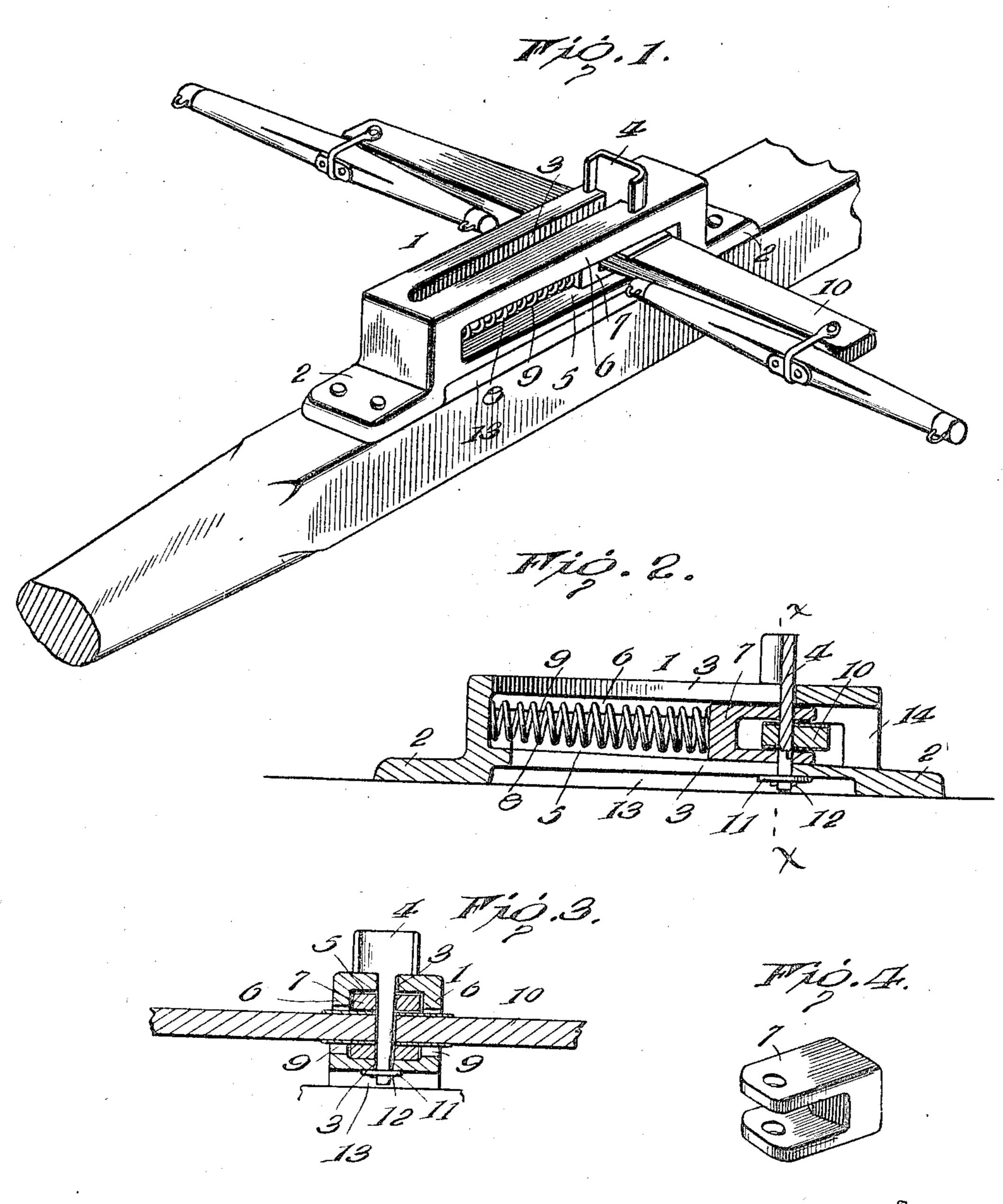
## J. H. COOK. DOUBLETREE HITCH. APPLICATION FILED APR. 5, 1905.



Inventor

J.H.Cook

By M. M. Carry, attorneys

## UNITED STATES PATENT OFFICE.

JOHN HARDIN COOK, OF IRVING, ILLINOIS, ASSIGNOR OF ONE-HALF TO ARTHUR KINKEAD, OF IRVING, ILLINOIS.

## DOUBLETREE-HITCH.

No. 813,039.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed April 5, 1905. Serial No. 253,973.

To all whom it may concern:

Be it known that I, John Hardin Cook, a citizen of the United States, residing at Irving, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Doubletree-Hitches, of which the following is a specification.

This invention relates to improvements in doubletree-hitches, and has for its object to produce a device of the character mentioned which will be extremely simple in construction and which will effectively operate to eliminate the strain due to sudden jerks, which is so objectionable where the double-tree is connected directly to the tongue of the vehicle.

Reference is to be had to the accompany-

ing drawings, in which—

Figure 1 is a perspective view of the device, showing it attached to the tongue of a wagon. Fig. 2 is a vertical central longitudinal section thereof. Fig. 3 is a transverse sectional view on the line xx of Fig. 2. Fig. 4 is a per-

spective view of the yoke.

The numeral 1 indicates the casing or housing within which the mechanism operates and which is provided at its base with longitudinal extensions 2, having openings therein through which bolts are passed in fasten-30 ing the device to the tongue or pole of a wagon. Longitudinal slots 3 are provided at the base and top of the housing 1, through which the pin 4 is adapted to slide, and longitudinal openings 9 are provided in the 35 sides, through which the doubletree 10 slides. Grooves 5 are provided at the top and bottom of the inside of the casing 1. The shoulders 6 at the sides of said grooves form a guideway within which a yoke 7 slides. The 40 yoke 7 is formed of a head and two arms extending therefrom at right angles, one above and one below the doubletree, with a hole in each, through which the pin 4 passes, whereby the yoke is secured to the doubletree. 45 The arms of this yoke are long enough to allow sufficient space between the doubletree and the head of the yoke for the doubletree to have a certain amount of oscillatory movement in order to accommodate itself to the 50 uneven draft of the team. A coil-spring 8 is interposed between the yoke 7 and one end of the housing, the other end of the housing be-

In assembling the device the coil-spring 8 and yoke 7 are inserted through the open

ing left open, as shown at 14 in Fig. 2.

end of the casing, one end of the doubletree passed through the side openings 9 and the pin 4 passed through the corresponding openings in the arms of the yoke and the doubletree 10. The end of the pin 4 is secured by a 60 washer 11 and pin 12. The longitudinal projections 2 are so formed that an open space 13 is left between the bottom of the housing and the surface of the tongue or pole. This allows access to the pin 12, so that one is enabled to remove or attach the doubletree at any time without removing the entire device from the tongue of the wagon.

The operation is as follows: Any sudden movement of the team, as in starting, will 70 cause the yoke 7 to slide in its guideway and compress the spring 8 until the pin 4 hits against the ends of slots 3. During this operation the spring gradually reacts upon the wagon and lightens all sudden jerks.

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What I claim as new, and desire to secure

by Letters Patent, is—

In a device of the character set forth, an oblong casing closed at one end and open at the opposite end and provided with out-80 wardly-extended terminal attaching extensions projecting below the lower side thereof to elevate the said casing and provide a space between it and the part to which the said casing may be secured, said casing having ver- 85 tical and horizontal intersecting longitudinal slots and having inner flanges bordering upon the longitudinal slots, a yoke insertible in the casing through the open end thereof and prevented from lateral displacement by said 90 inner longitudinal flanges, a doubletree freely movable in the horizontal slot and preventing outward displacement of the yoke, a pin connecting the doubletree with the yoke and having its end portions freely movable in 95 the said vertical slot, securing means applied to the lower end of the pin and accessible through the space below the casing, and a spring arranged within the casing and confined between the closed end thereof and the 100 yoke and normally exerting a pressure upon the yoke to hold it at the limit of its rearward movement.

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

## JOHN HARDIN COOK. [L. s.]

Witnesses:

PIERCE J. FULLERTON,
JAMES E. COCKELNAS.