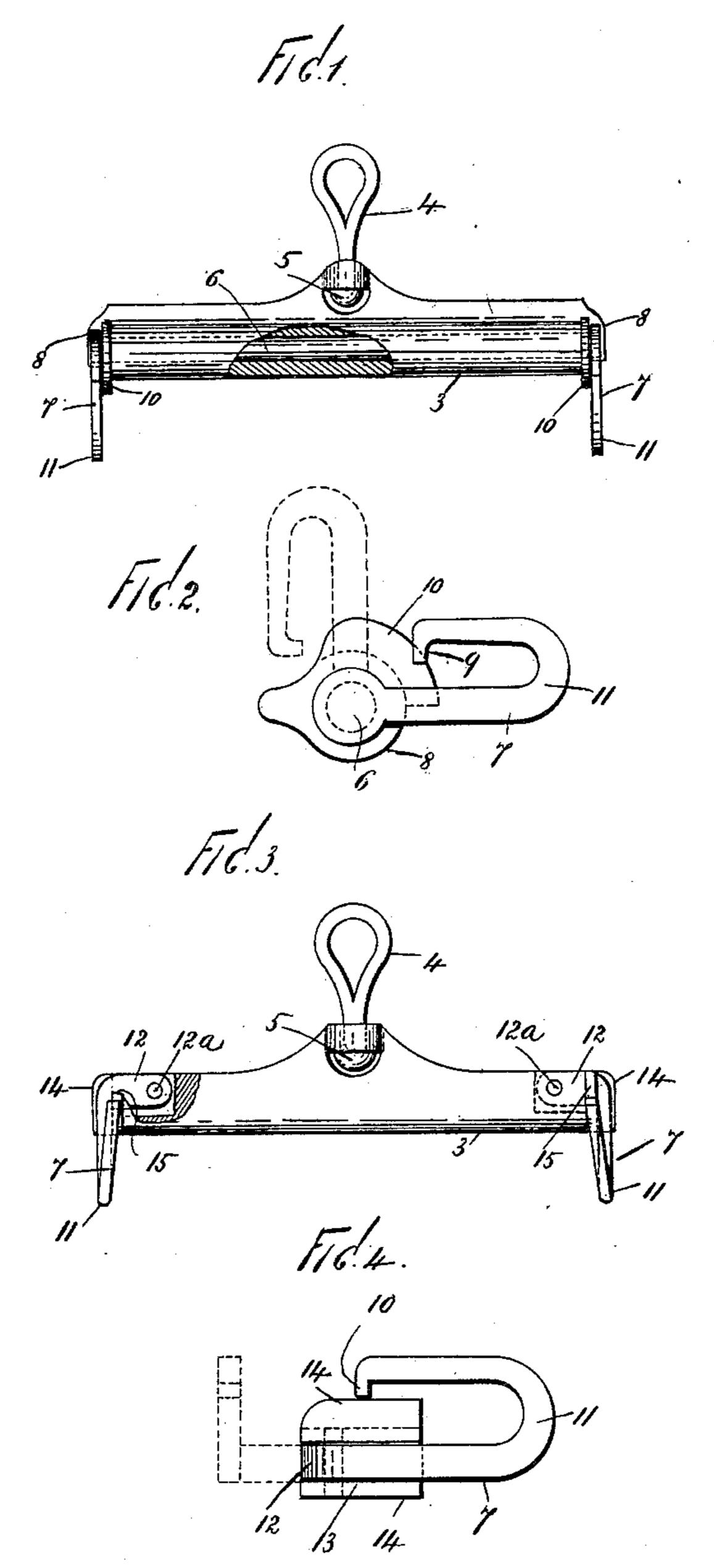
## J. A. McCAIN. SINGLETREE.

(Application filed Feb. 28, 1899.)

(No Model.)



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## United States Patent Office.

JOHN A. McCAIN, OF AUBURN, GEORGIA.

## SINGLETREE.

SPECIFICATION forming part of Letters Patent No. 631,026, dated August 15, 1899.

Application filed February 28, 1899. Serial No. 707,161. (No model.)

To all whom it may concern:

Be it known that I, John A. McCain, a citizen of the United States, residing at Auburn, in the county of Gwinnett and State of Georgia, have invented certain new and useful Improvements in Singletrees, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to singletrees; and the object thereof is to furnish a device of this class which shall be strong, simple, and cheap in construction and to which the traces of a harness may be readily attached and securely held thereby.

My invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which like numerals of reference refer to like parts in the several views, and in which—

Figure 1 is a side view of my device, the parts being in operative position. Fig. 2 is an end view thereof; Fig. 3, a view similar to Fig. 1, showing a modified form of construction shown in Figs. 3 and 4 the hooks 7 are provided with short inwardly-directed arms 12, which are pivoted in corresponding slots or recesses 13, formed

In the practice of my invention as shown in Figs. 1 and 2 I provide a singletree 3, which is tubular in form and provided with a clevis or other coupling 4, by which it may be secured to a wagon-body or other construction.

The clevis or coupling 4 has preferably a swivel connection with the singletree, as shown at 5. Passing through the tubular body of the singletree 3 is a rod 6, revolubly mounted therein, and the end portions thereof are formed into or provided with trace-hooks 7, which project at right angles thereto and with which the traces are adapted to be connected.

The end portions of the clevis 3 are provided with bottom projections or shoulders 8, and the arms of the hooks 7 are provided with inwardly-directed projections 9, which are adapted to engage with or abut against segmental flanges 10, formed on the upper side of the ends of the singletree, when the rod 6 is so turned as to depress the loop portions 11 of said hooks, and in this position of the hooks the opening thereinto is closed, so as to present the traces from being accidentally detached therefrom.

The traces are not shown, but may be of any form or construction, and the operation of this form of my device is evident from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

When it is desired to secure the traces to the singletree, the hooks 7 are turned upwardly, it being understood that the rod 6, 60 with which said hooks are connected, is free to turn in the singletree, so as to elevate the hooks, and the trace-rings or other fastening devices may be then slipped into said hooks, and when the hooks are again depressed, 65 which is done by the weight of the trace-chains, the open end of the hooks is closed by the projections 19 abutting against or coming in contact with the segmental flanges 10. In this position of the parts the traces 70, will be held in the hooks and can only be removed therefrom by again raising said hooks.

In the form of construction shown in Figs. 3 and 4 the hooks 7 are provided with short inwardly-directed arms 12, which are pivoted 75 in corresponding slots or recesses 13, formed in the ends of the singletree, as shown at 12<sup>a</sup>. The slots or recesses 13 form bottom projections 14 at the ends of the singletree, which correspond with the projections 8 in Figs. 1 80 and 2, and at the top of the ends of the singletree are transverse projections or flanges 15, which take the place of the segmental flanges 8 shown in Figs. 1 and 2. In both these forms of construction it will be seen 85 that the hooks 7 are pivotally supported. In the form of construction shown in Figs. 3 and 4 the hooks must be turned outwardly in order to connect the traces therewith, while in the form of construction shown in Figs. 1 and 90 2 said hooks are turned upwardly. In both cases the hooks are normally held in a horizontal position and the downwardly-directed projections 10 on the arms thereof abut against or come in contact with the flanges or 95 projections on the upper portions of the ends of the singletree.

In both forms of construction the hooks are normally supported in a horizontal position by the bottom projections at the ends of the 100 singletree, (designated in Figs. 1 and 2 by the reference-numeral 8 and in Figs. 3 and 4 by

the reference-numeral 14,) and my improvements in singletrees are well adapted to accomplish the result for which they are intended and are also comparatively inexpensive, and it will be apparent that changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

1. A singletree, comprising a body portion provided with pivoted trace-hooks at the ends thereof, and means for limiting the pivoted swing of said trace-hooks, said body portion being also provided at the ends thereof with transverse flanges, and the arms of the hooks being provided with inwardly-directed pro-

jections which operate in connection with said 20 flanges, substantially as shown and described.

2. A singletree comprising a tubular body portion, a rod passing therethrough and revolubly mounted therein, and trace-hooks secured to the ends of said rods, said body portion being provided at each end with a shouldered portion adapted to limit the pivoted swing of said trace-hooks and close the open ends thereof, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 17th day of February, 1899.

J. A. McCAIN.

Witnesses:

JNO. M. WILLIAMS, B. O'CASEY.