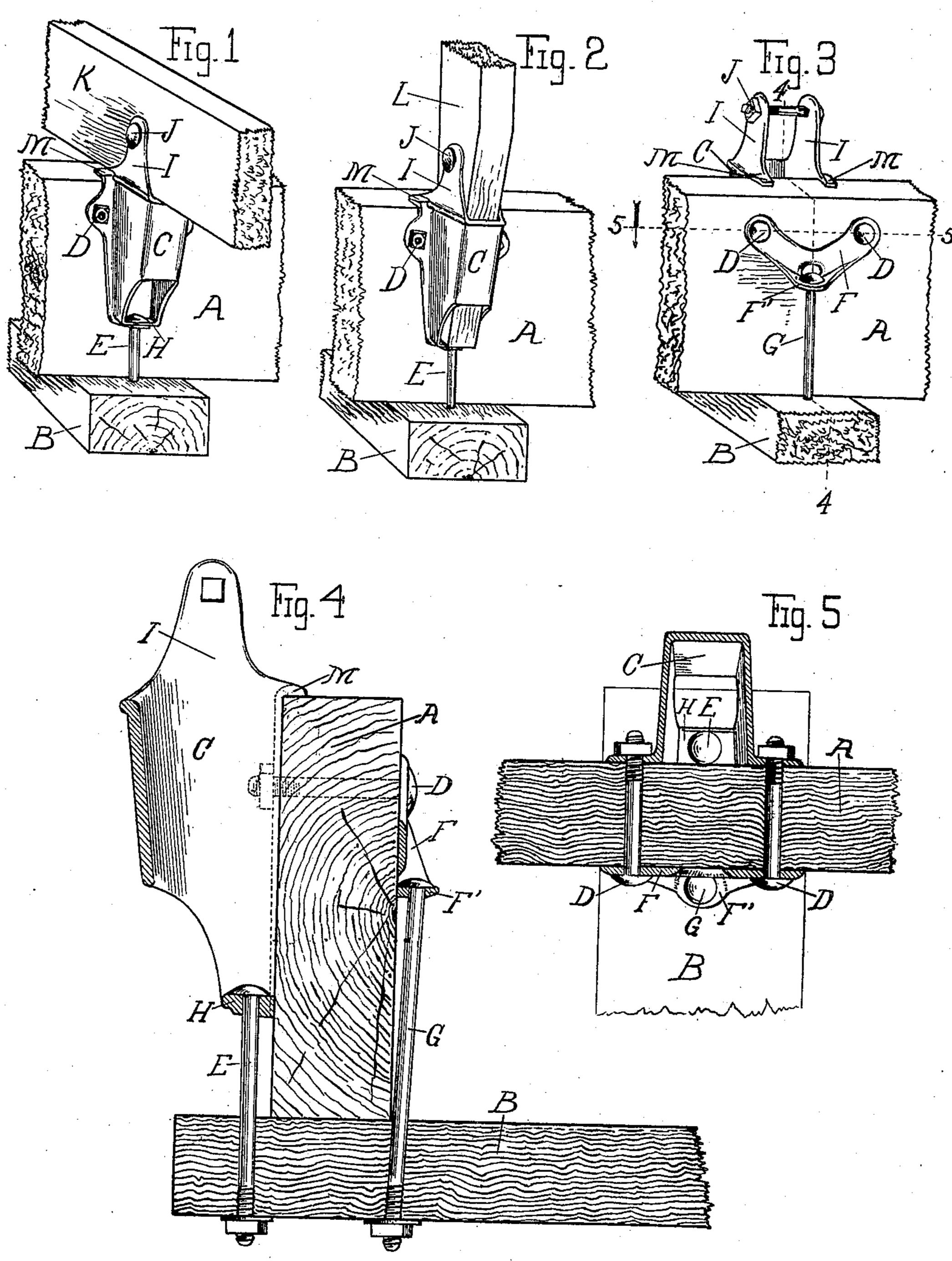
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W. LOUDEN.
FIXTURE FOR WAGON RACKS AND BOXES.
APPLICATION FILED APR. 17, 1905.



W/TNESSES

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## FIXTURE FOR WAGON RACKS AND BOXES.

No. 887,258.

Specification of Letters Patent.

Patented May 12, 1908.

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To all whom it may concern:

Be it known that I, WILLIAM LOUDEN, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of 5 Iowa, have invented a new and useful Improvement in Fixtures for Wagon Racks and Boxes, of which the following is a specifica-

This invention relates to fixtures for puttion. 10 ting together the timbers of wagon racks and boxes, such as hay racks, stock racks, wood racks, manure boxes, &c., in such a way that the various racks and boxes may be readily changed from one form to another, as re-15 quired, and it consists of the features set forth in this specification and particularly

pointed out in the claims.

In the accompanying drawings which form a part of the specification, Figure 1 is a per-20 spective of a section of a rack embodying my invention as usually constructed for handling hay. Fig. 2 is the same, as arranged to hold upright stakes such as are used in stock racks, wood racks, manure boxes &c. Fig. 25 3 is a perspective of a rear or inside view, the upper timbers being removed. Fig. 4 is a transverse vertical section on the line 4--4 of Fig. 3. Fig. 5 is a horizontal section on the line 5—5 of Fig. 3.

Similar reference letters indicate similar

parts in the several views.

Referring to the drawings, A represents a section of a longitudinal timber of a wagon rack or box and B a section of one of the 35 lower cross timbers which join the longitu-

dinal timbers together.

C is a casting of a special shape which is secured to the timber A by bolts D, and to the timber B by a bolt E. On the other side of 40 the timber A is a small casting or plate F through which the bolts D also pass so as to hold it securely thereto. At the lower end of this plate is an out-turned lug F' having a hole through which a bolt G is passed, which bolt is also passed through the timber B close to the inner side of the timber A. The casting C is made in the general form of a stakeholder with outwardly projecting lugs for the bolts D, but at its lower end it has a cross 50 piece H having a hole in its center to receive the bolt E. On its upper end it has two upwardly extended lugs I in each of which there is a hole to receive a bolt J.

When used for constructing an ordinary between the lugs I and is pressed down until | lower timber, and a vertically disposed bolt 55 hay rack the upper cross timber K is inserted

it rests on the top of the timber A, and the bolt J is passed through the holes in the lugs I and through the timber K to hold it in po-

sition, as shown in Fig. 1.

When used to construct a stock rack, a wood rack or a box in which upright stakes are used, the cross timber K is removed, and a stake L is inserted in the holder C, and the necessary attachments, if any are required, 65 may be made thereto. If necessary to hold it more securely in place, the bolt J may be passed through the holes in the lugs I and through the stake inserted in the holder, as shown in Fig. 2. It will readily be seen that 70 the holder C will be securely held to the timber A by means of the bolts D which also pass through and securely hold the plate F. Also, that the timbers A and B will be securely held together by the bolts E and G 75 passing through the latter, the bolt E being connected to the holder C by means of the cross piece H, and the bolt G being connected to the plate F by means of the out-turned lug F'. It will also be seen that by means of 80 the fixtures herein described, various kinds of wagon racks and boxes which are known to those skilled in the art may be constructed by simply changing the timbers which may be connected to the holder C. In order to 85 make it easy on the bolts D and to make the holder adhere more firmly to the timber A, I provide the holder with laterally projecting lugs M which are adapted to catch over the top of the timber A and to prevent the holder 90 from being drawn downward by tightening the bolt E.

What I claim is:—

1. The combination with a longitudinal main timber and a lower cross timber, of a 95 holder adapted to receive and hold an upright stake, said holder being secured to the outer side of said main timber by bolts passing horizontally therethrough, and having a space between its lower end and the lower 100 timber, and a vertically disposed bolt connecting said lower end and lower timber together.

2. The combination with a longitudinal main timber and a lower cross timber, of a 105 holder adapted to receive and hold an upright stake, said holder having a flange to catch over the upper and outer edge of said main timber and being secured thereto by bolts passing horizontally therethrough, and 110 having a space between its lower end and the

connecting said lower end and lower timber together.

3. The combination with a longitudinal main timber and a lower cross timber, of a 5 holder adapted to receive and hold an upright stake, said holder being secured to the outer side of said main timber by bolts passing horizontally therethrough, and having a space between its lower end and the lower 10 timber, and a vertically disposed bolt connecting said lower end and lower timber together, a plate having a lug affixed to the inner side of the main timber by the bolts securing the holder thereto and a vertically 15 disposed bolt passing through the lug and holding the plate and the inner portion of the lower timber together.

4. The combination with a longitudinal main timber and a lower cross timber, of a 20 holder adapted to receive and hold an upright stake, said holder having lugs fitting the outer face of the main timber, horizontally disposed bolts passed through said lugs and through the timber, the lower end of the holder having a space between it and the lower timber, and a vertically disposed bolt connecting said lower end and the lower timber together.

5. The combination with a longitudinal 30 main timber and a lower cross timber, of a holder adapted to receive and hold an upright stake and having upwardly extended lugs to receive and support an upper cross timber, said holder being secured to the outer 35 side of said main timber by bolts passing horizontally therethrough, and having a space between its lower end and the lower timber, and a vertically disposed bolt connecting said lower end and the lower timber 40 together.

6. The combination with a longitudinal main timber and a lower cross timber, of a holder adapted to receive and hold an upright stake and having upwardly extended 45 lugs to receive and support an upper cross timber, said holder being secured to the outer side of said main timber by bolts passing horizontally therethrough, and having a space between its lower end and the lower 50 timber, a vertically disposed bolt connecting

said lower end and lower timber together, a plate having a lug affixed to the inner side of the main timber by the bolts securing the holder thereto and a vertically disposed bolt passed through the lug and holding the plate 55 and the inner portion of the lower timber together.

7. The combination with a longitudinal main timber and a lower cross timber, of a holder adapted to receive and hold an up- 60 right stake and having upwardly extended lugs to receive and support an upper cross timber, a bolt passed through said lugs to hold said upper timber or the upright stake in place, said holder being secured to the 65 outer side of said main timber by bolts passing horizontally therethrough, and having a space between its lower end and the lower timber, and a vertically disposed bolt connecting said lower end and the lower timber 70 together.

8. In a device of the character described, a rectangular shaped holder having walls on three sides and open at the upper end for the reception of a stake, flanges on the outer 75 sides of the open edges of the side-walls, bolts passed through said flanges so as to connect the holder to the side of the main timber, a cross piece in the lower end connecting the side-walls together, and a bolt 80 passed through said cross piece to connect

the holder to a lower cross timber.

9. In a device of the character described, a rectangular shaped holder having walls on three sides and open at the upper end for the 85 reception of a stake, flanges on the outer sides of the open edges of the side-walls, bolts passed through said flanges so as to connect the holder to the side of the main timber, a cross piece in the lower end connecting the 90 side-walls together, a bolt passed through said cross piece to connect the holder to a lower cross timber, and upwardly projecting lugs on the upper edges of the side-walls of the holder to support an upper cross timber. 95

WILLIAM LOUDEN.

Witnesses:

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