

H. D. O'CONNOR.

PITCHFORK.

APPLICATION FILED DEC. 26, 1908. RENEWED JAN. 21, 1910.

951,329.

Patented Mar. 8, 1910.

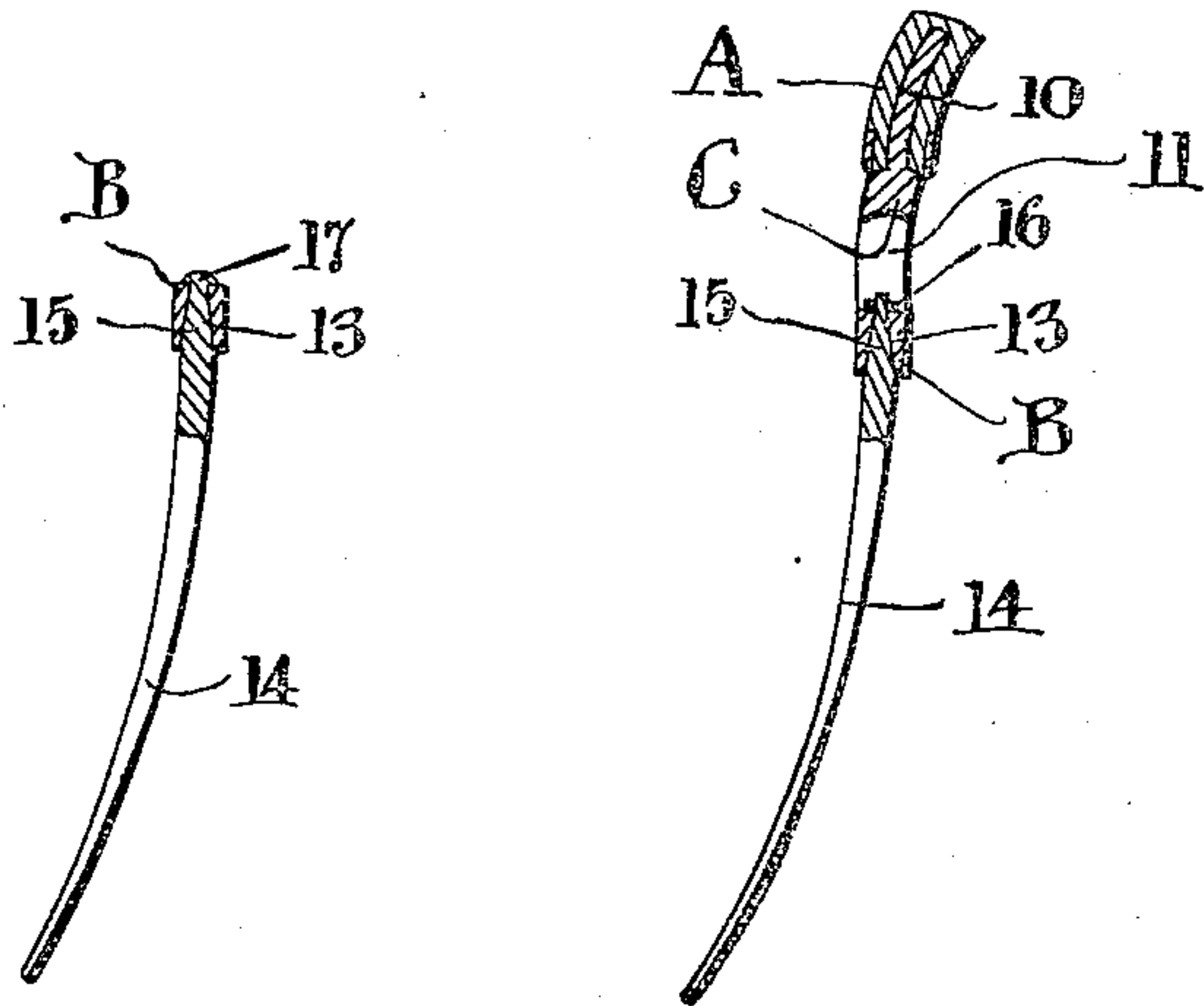


FIG. 3.

FIG. 2.

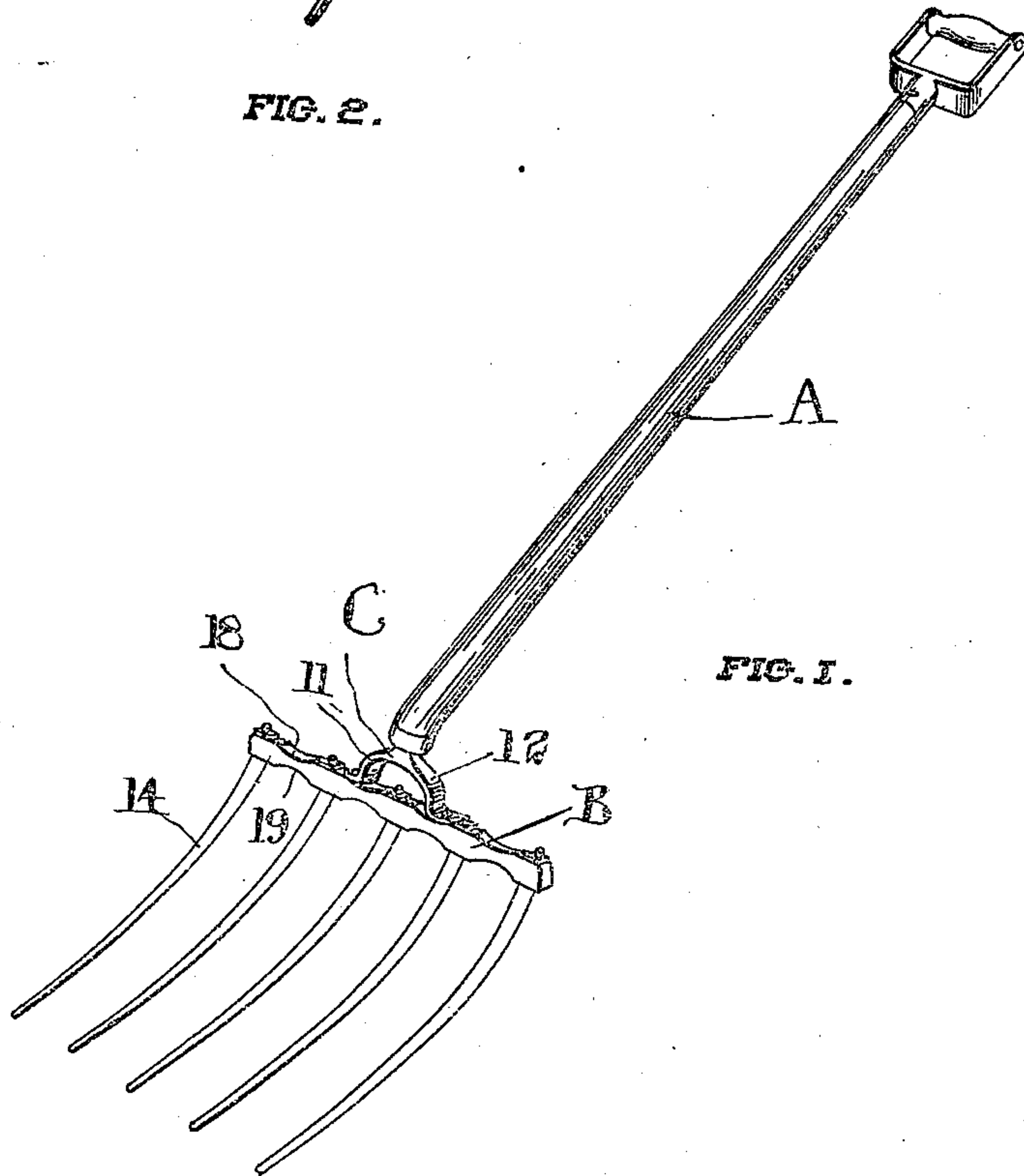


FIG. 1.

WITNESSES

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PITCHFORK.

951,329.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY DANIEL O'CONNOR, of the city of Ottawa, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Pitchforks, of which the following is a specification.

My invention relates to improvements in pitch forks, and the objects of my invention are to provide extremely simple and effective means for locking removable prongs to the cross-bar of the fork, and further for connecting the handle to the cross-bar in such a manner as not to interfere with the central prong. These and other features of the invention are described in detail in the accompanying specification and drawings.

In the drawings, Figure 1 is a perspective view of the fork. Fig. 2 is a sectional detail through the cross-bar and one of the prongs. Fig. 3 is a sectional view through the cross-bar showing an alternative method of connecting the prong thereto.

In the drawings, like characters of reference indicate corresponding parts in each figure.

Referring to the drawings, A represents a handle of any suitable type and B represents the cross-bar thereof.

In accordance with the present invention, the cross-bar is connected to the handle by means of a connecting member C having a tongue 10 inserted in the handle and bifurcated ends 11 and 12, which are connected to the cross-bar in a suitable manner as by rivets or bolts, or welding.

In accordance with the present invention, a plurality of spaced and tapered sockets 13 are provided for the reception of the removable prongs 14, each of said sockets tapering inwardly from the bottom toward the top, and each of the prongs being provided with corresponding tapered ends 15 adapted to fit the socket. The said ends 15 are made slightly longer than the thickness of the cross-bar and the ends are rigidly locked to the upper side of the cross-bar. This, in the form shown in Figs. 1 and 2, is accomplished by nuts 16 which are screwed on to the end of the prong, while in the form shown in Fig. 3, it is accomplished by turning over the ends of the prongs themselves,

to form rivet heads 17. It will be observed that the space between the bifurcated ends 11 and 12 of the connecting members C enables the central prong to be locked in position.

To reduce the weight of the cross-bar, the same is formed with concaves 18 and 19, between the sockets which receive the prongs. It will be observed that the sides of the cross bar are made flat and are not reduced in diameter. In this way the bar is strong to resist lateral stress and will not bend as it would if the sides were also reduced in diameter.

From the above, it will be seen that the prongs may be readily and quickly inserted in position and locked therein. When any one prong is broken, it is only necessary to undo the screw securing it and replace it by another. Thus, the life of the pitch fork is very much increased, as it is not necessary to discard the whole fork when only a single prong is broken.

The tapered ends of the prong fitting into the tapered socket, forms a very effective method of rigidly holding the prong in place, and preventing any turning movement thereof.

As many changes could be made in the above construction, and many apparently widely-different embodiments of my invention, within the scope of the claim, could be made without departing from the spirit or scope thereof, it is intended that all matter contained in these specifications and drawings shall be interpreted as illustrative and not in a limiting sense. It will be understood further that while the invention is illustrated as applied to a pitch fork, yet the invention may be applied with equal facility to rakes, coal forks, and any other similar tool or implement in which it is desired to lock a removable prong to the cross-bar.

What I claim as my invention is:—

A pitch fork comprising a wooden handle having a ferrule extending around the end of the same, a cross bar formed with plain flat sides and with a plurality of tapered spaced sockets therein, the top and bottom of the cross bar between the sockets being concaved to reduce the thickness of the bar,

and a connecting member having a prong
extending into the handle within the fer-
rule, and having bifurcated ends connected
to the cross bar, prongs having tapered ends
5 fitting into the sockets, and means for fas-
tening the upper ends of the prongs to the
cross bar.

In witness whereof I have hereunto set
my hand in the presence of two witnesses.

HENRY DANIEL O'CONNOR.

Witnesses:

RUSSELL H. SMART,
MARY C. LYON.