

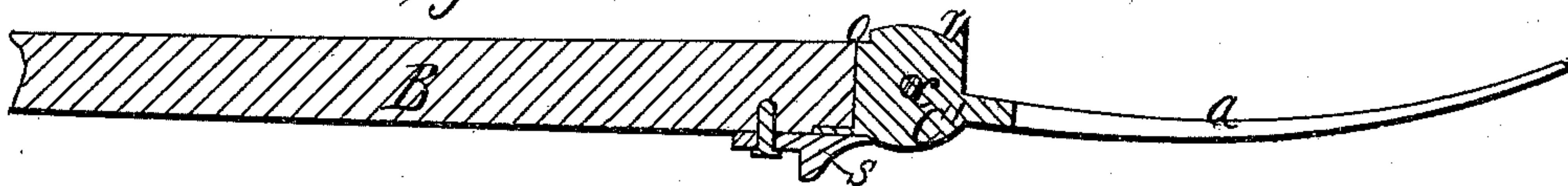
*B. L. Tibbets.*

*Hoe & Fork.*

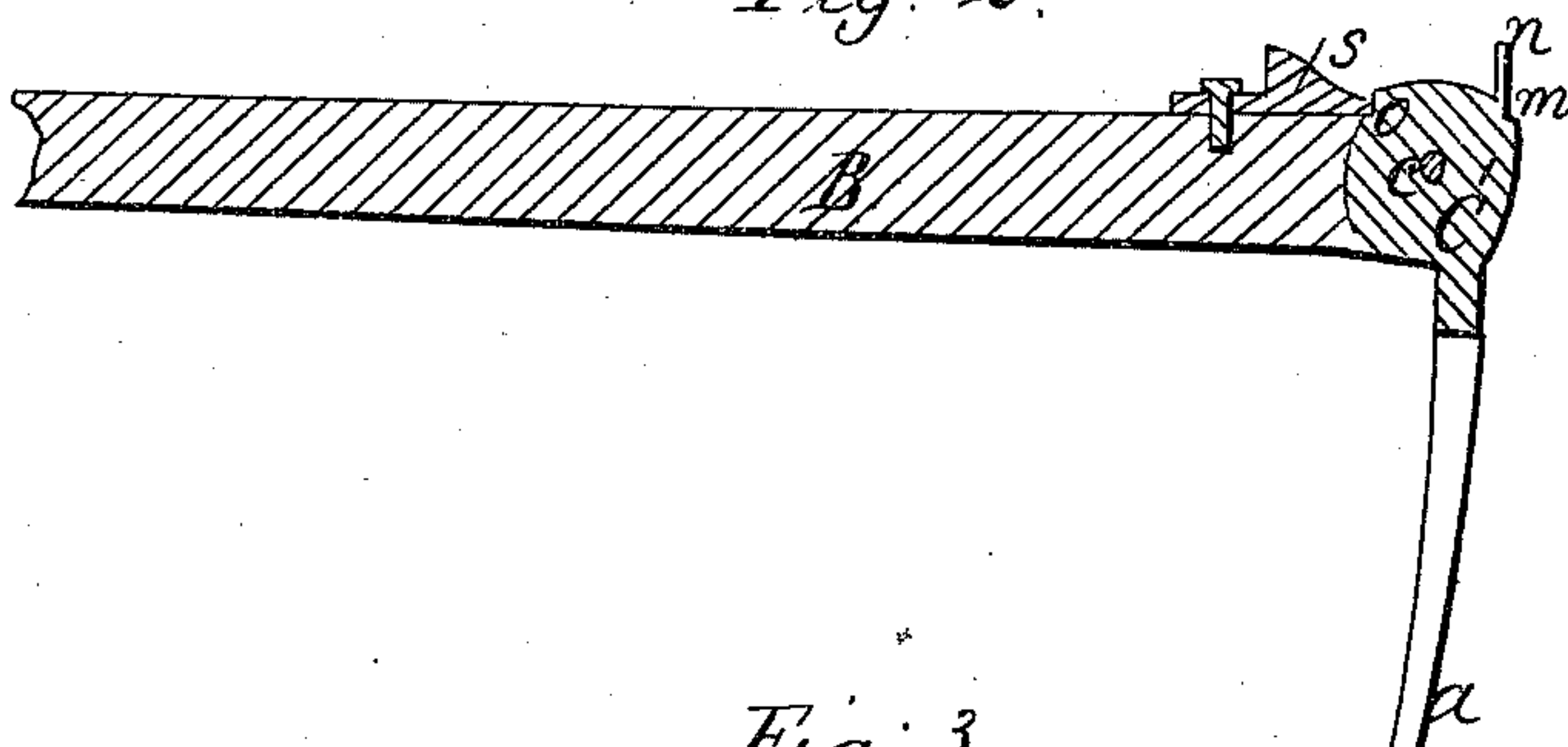
*N<sup>o</sup> 88,591.*

*Patented Apr. 6, 1869.*

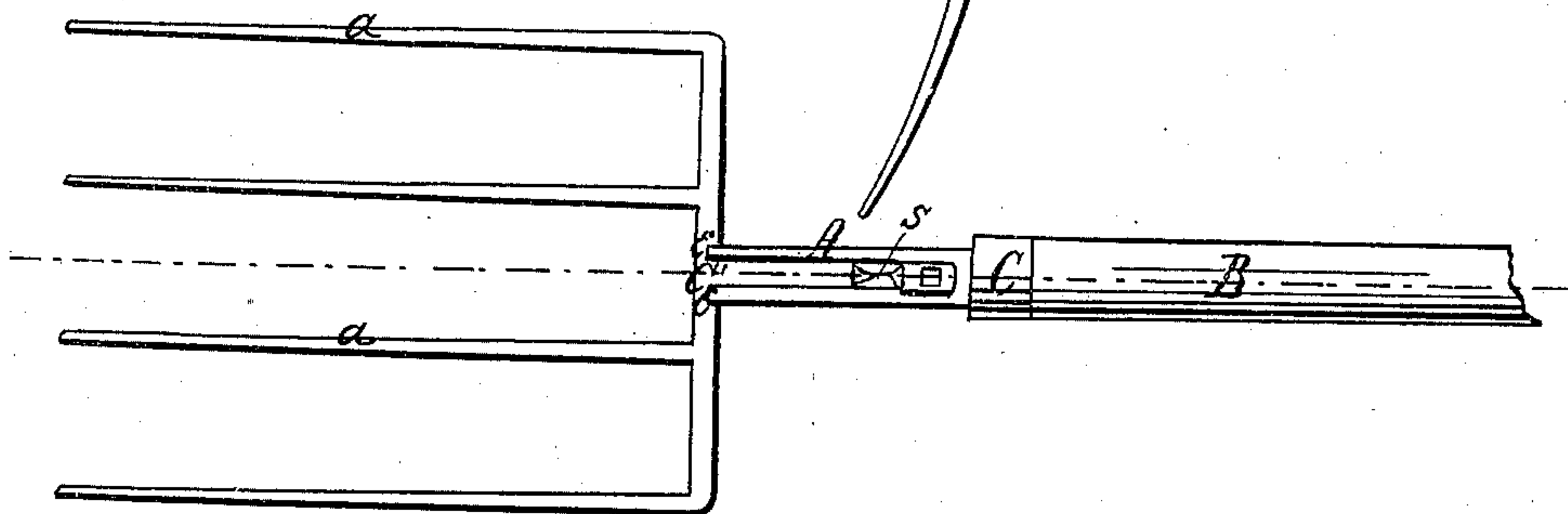
*Fig. 1*



*Fig. 2.*



*Fig. 3.*



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*Atty*



# United States Patent Office.

BENJAMIN L. TIBBETTS, OF SOUTH CHINA, MAINE.

Letters Patent No. 88,591, dated April 6, 1869.

## IMPROVEMENT IN COMBINED HOE AND FORK.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENJAMIN L. TIBBETTS, of South China, in the State of Maine, have invented a new and useful Improvement in Combined Hoe and Fork; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a longitudinal section through line  $x-x$  of fig. 3, showing the instrument adjusted for a fork;

Figure 2 is a similar section, showing it adjusted for a hoe; and

Figure 3, a back view of the instrument, showing it adjusted as a fork.

To enable those skilled in the art to make and use my invention, I now proceed to describe its construction and operation.

Similar letters in the drawings refer to like parts.

In this invention the head of the instrument is pivoted to the handle, and the joint is provided with a simple and effective arrangement by which the head can be securely fixed in such a position that the tines shall extend nearly in the same plane with the handle, so as to adjust the instrument as a fork, or in such a position that the tines shall stand nearly at right angles with the handle, so as to adjust the instrument for use as a hoe or rake.

In the drawings—

A is the head.

$a$   $a$ , the tines; and

B, the handle, provided with a ferrule, C, to increase its strength.

The lower end of the head is also provided with a deep gain, into which fits a metallic plate, C', attached to the head, and by means of which, in connection with a pin,  $c$ , the head is pivoted to the handle, so that it can be thrown into the position shown in figs. 1 and 3, or into that seen in fig. 2.

The end of the head is provided with a projecting point,  $e$   $e$ , on its back at each side of the gain, and, in addition to that, the gain is extended slightly further into the handle on the rear or upper side than on the front or lower side, the inner end wall of the gain being either inclined from the front to the rear side of the handle, or curved, and provided with a recess at the upper edge, or running straight across, and provided with the recess. The curved form is best however for the perfect fitting of the parts to each other.

The plate C' is provided with a notch,  $m$ , on its back, having an oblique shoulder, a projecting point,  $n$ , at its upper rear corner, an inclined notch and shoulder,  $o$ , at its lower rear corner, and a notch and shoulder,  $r$ , at its lower front corner.

In addition to these details of construction, a button,  $s$ , is attached to the back of the handle, the lower end of the button being inclined or bevelled off, to fit against the oblique shoulder  $m$  when the head is in position shown in figs. 1 and 3 and against the inclined shoulder  $o$ , when the head is in the position shown in fig. 2.

The device being thus constructed, its operation is as follows:

If wanted for use as a fork, the button is turned, so as to allow the head to be rocked on its pivot, and the head is then brought to the position shown in figs. 1 and 3, and the button brought back into a line with the handle, and resting on the back of plate C' against shoulder  $m$ . When the parts are in this position the back of the head sets against the points  $e$   $e$ , the point  $n$  rests against the bottom of recess  $i$  and the button rests upon the plate and against the shoulder  $m$ , thus locking the head firmly in position.

To increase the firmness of the fastening, the shoulder  $m$  may be slightly inclined, or made to jut forward, so that the edge of the button shall lock under it as well as against it.

In using the fork it is evident that the strain will come almost entirely upon the point  $c$  and points  $e$   $e$  and  $n$ , all which are of metal, and able to bear it. The button will only be necessary to prevent the instrument from doubling up, as it is inserted into the compost, or other material upon which the laborer is at work.

If wanted for use as a hoe or rake, the button is thrown off plate C', and the head brought down to the position shown in fig. 2, when the button is set back against the inclined shoulder  $o$ , and the head is thereby firmly locked and confined. When in this position the plate C' is securely clamped between the button, the pivot, and the lower edge of the curved wall  $w$ , the button sitting against notch  $o$  at the upper corner, and the sharp edge  $v$ , sitting against the notch  $r$ , at the lower corner of the plate.

The whole instrument is light, neat in appearance, simple in its construction, convenient of operation, and can be made at slight expense, its cost but little exceeding that of the ordinary hoe or fork, and falling far below the united cost of a hoe and a fork when made in separate instruments. The farmer will therefore by its use, save the expense of one of those entirely, besides the labor and inconvenience of being obliged to carry both of them, to and from his work, and to exchange one for the other, as occasion requires.

I am aware that an instrument has been heretofore made and used, having a head pivoted to a handle, so as to form either a hoe or a fork, as might be required, and I do not, broadly, claim such device as my invention; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

A combined fork and rake, when constructed and operating as above described; that is to say, the head A being pivoted to the handle B by means of a plate, C', working on a pin,  $c$ , in the lower end of the handle, the plate being provided with the notches  $m$   $o$   $r$  and point  $n$ , while the handle is provided with the points  $e$   $e$ , the recess  $i$ , the shoulder  $v$ , and the button  $s$ , all arranged and operating in connection with each other, substantially as and for the purposes described.

Witnesses:

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ELIJAH E. HALL,  
JOHN F. WYMAN.