

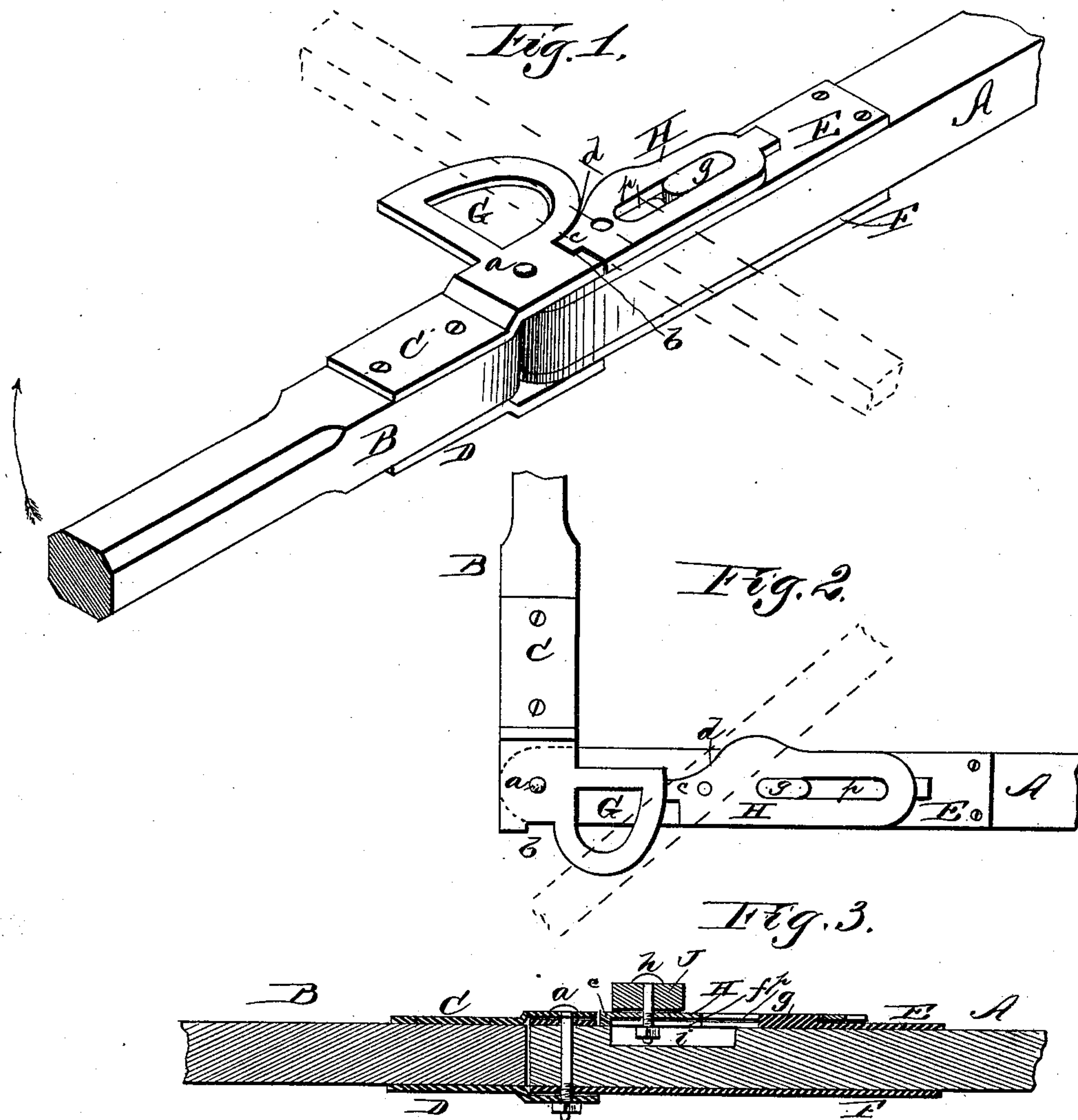
(No Model.)

J. I. HOKE.

TONGUE FOR AGRICULTURAL IMPLEMENTS.

No. 253,704.

Patented Feb. 14, 1882.



Witnesses:
H. C. Deane
W. R. Heyworth

Inventor:
J. I. Hoke.
Per W. A. Alexander
Attorney.

UNITED STATES PATENT OFFICE.

JOHN I. HOKE, OF SOUTH BEND, INDIANA.

TONGUE FOR AGRICULTURAL IMPLEMENTS.

SPECIFICATION forming part of Letters Patent No. 253,704, dated February 14, 1882.

Application filed October 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN I. HOKE, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Tongues for Agricultural Implements; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 represents a perspective of my device; Fig. 2 a plan view with the movable tongue at right angles, and Fig. 3 a central longitudinal section of the invention.

My invention is especially applicable to harvesting-machines; but it is also applicable to other heavy machines wherein draft-tongues are employed.

My object is to relieve the necks of the horses from undue strain while turning the machine at the corners of the field; and to this end I have invented a combined automatic latch and cam, which I apply to a divided and jointed tongue in such manner that the machine is turned by the draft of the team, and the movable part of the said tongue is locked while the team is pulling in a straight line and unlocked while the team is in the act of turning, as will be hereinafter explained.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation.

I construct the draft-tongue of two parts, A B. The part A may be attached rigidly to the machine in any suitable manner. The part B is jointed to A by means of a vertical bolt, *a*, and this is the part—that is, part A—to which the horses are hitched. To strengthen the joint of the two sections A B, I employ plates C D E F. The two plates C D are bolted respectively to the top and bottom sides of the tongue-section B, and the two plates E F are bolted to the shortest tongue-section A and underlap the plates C D. The plate C is constructed with a cam, G, projecting laterally from the right-hand side of the sectional tongue, and this plate is also constructed with a notch, *b*, at the rear terminus of said cam. It will thus be seen that the cap-plate C serves a

threefold purpose—to wit, a strengthening-plate, a cam-plate, and a notched plate.

H designates another plate, which I shall denominate a “latch.” This latch is constructed with a nose, *c*, adapted to enter the notch *b* of plate C, a convex edge, *d*, adapted to be acted on by the cam G for giving backward thrust to this latch, and a lug, *e*, which is free to play in the longitudinal slot *f* of the plate E. The latch is guided at its front end by the lug *e*, and at its rear end it is guided by a boss, *g*, formed on the plate E and entering slot *p* in the latch.

J designates a double-tree, which is centrally pivoted to a vertical bolt, *h*, which bolt passes through the front part of the latch, through the slots *p f*, and receives on its lower end a nut, which plays in a recess, *i*, made in the shortest tongue-section A.

It will be seen that the nose *c* of the latch H enters the notch *b* at the rear end of the cam-plate C, and that when the horses pull on the double-tree J the nose of the latch locks the two sections of the draft-pole together in a straight line. When it is desired to turn the machine the horses are guided short round to the right, and as they turn the curved edge of the cam G presses the latch H backward, thus unlocking the tongue-sections and allowing the movable section B thereof to assume an angle with respect to the line in which the horses had been traveling. The team is then started ahead and the machine is pulled around in a position to follow them, in which position the nose of the latch engages with the notch *b* and locks the tongue-sections in a straight line.

It is obvious that the bearing-edge of the latch may be an incline, or any other form capable of being acted on by the cam to produce the desired effect, and that the cam and latch-bearing may be placed upon either or both sides, if so desired, without departing from the spirit of my invention.

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

1. The combination of a jointed draft-tongue, a cam, a latch, a notch to receive the locking-nose on the latch, and a double-tree attached to the latch, all constructed and arranged to operate substantially as described.

2. The combination of the two-part jointed draft-tongue, the lapped strengthening-plates, the joint-bolt *a*, the cam, the latch, and its guides, all constructed and arranged to operate substantially as described.

5 3. The combination of the two-part jointed draft-tongue, the cam, the slotted and guided latch, and the convex bearing-edge on this latch, against which the said cam acts, all con-

structed and arranged to operate substantially as described. 10

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN I. HOKE.

Witnesses:

JAMES DU SHANE,
ROBERT P. KIZER.