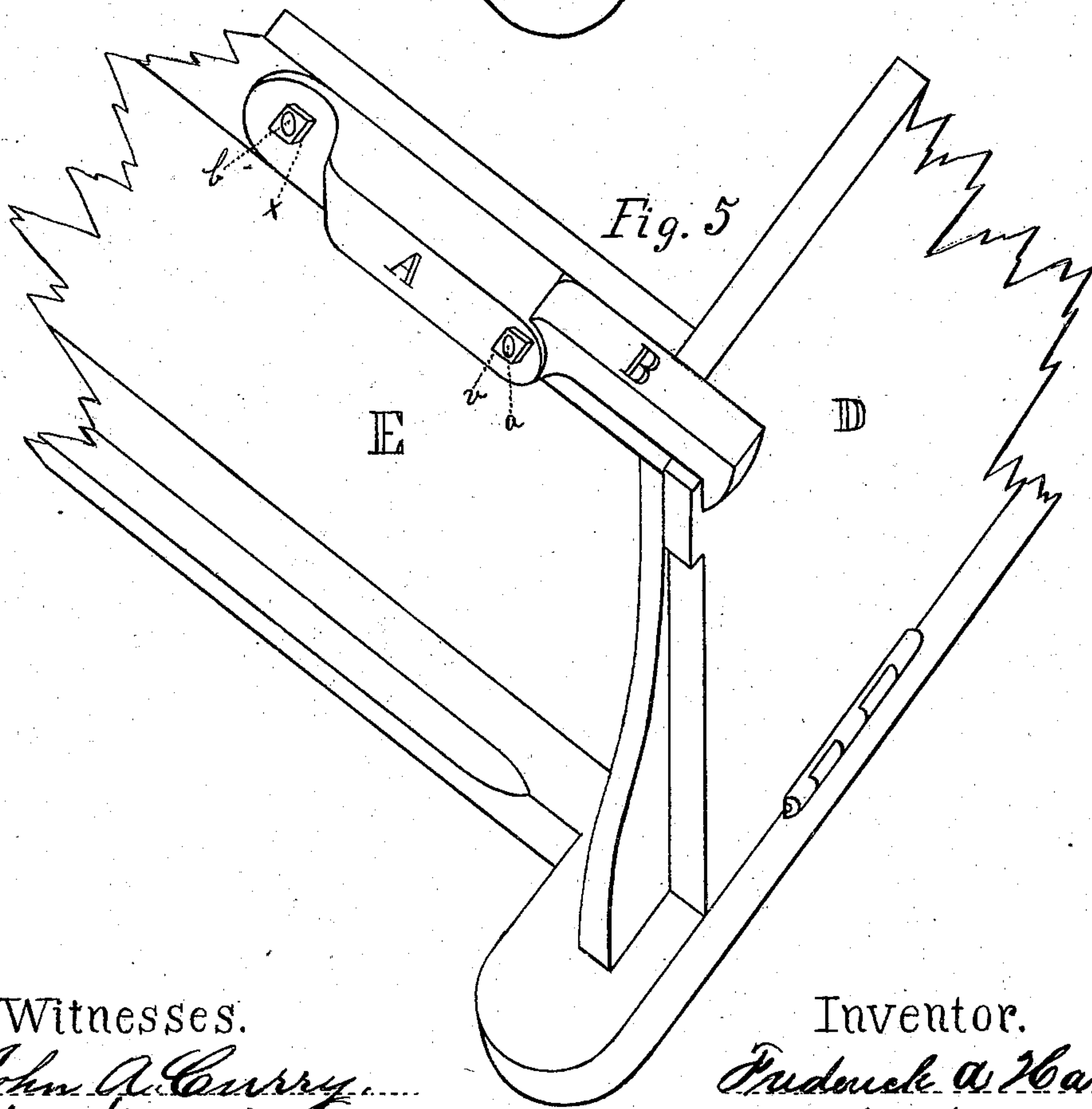
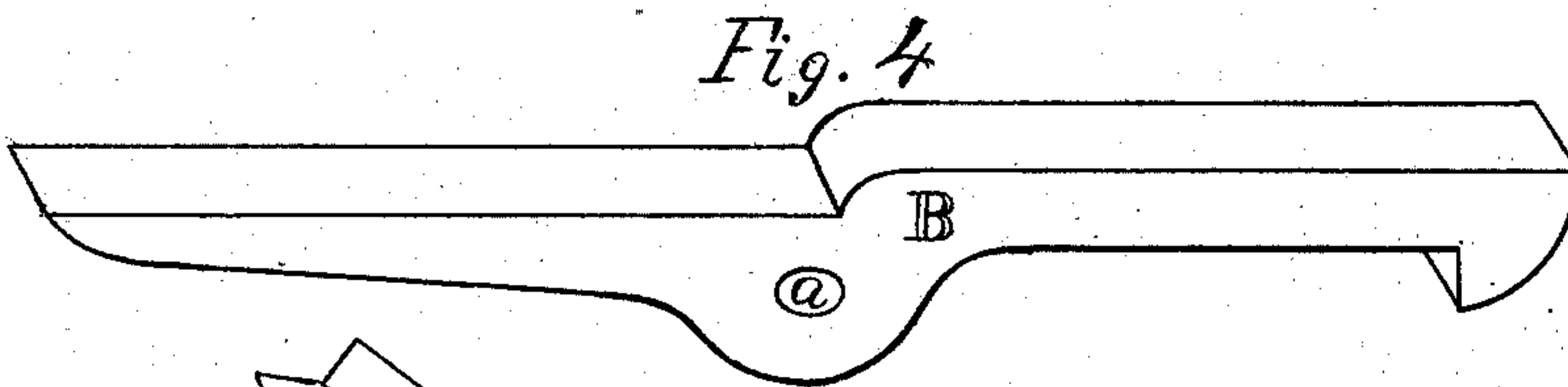
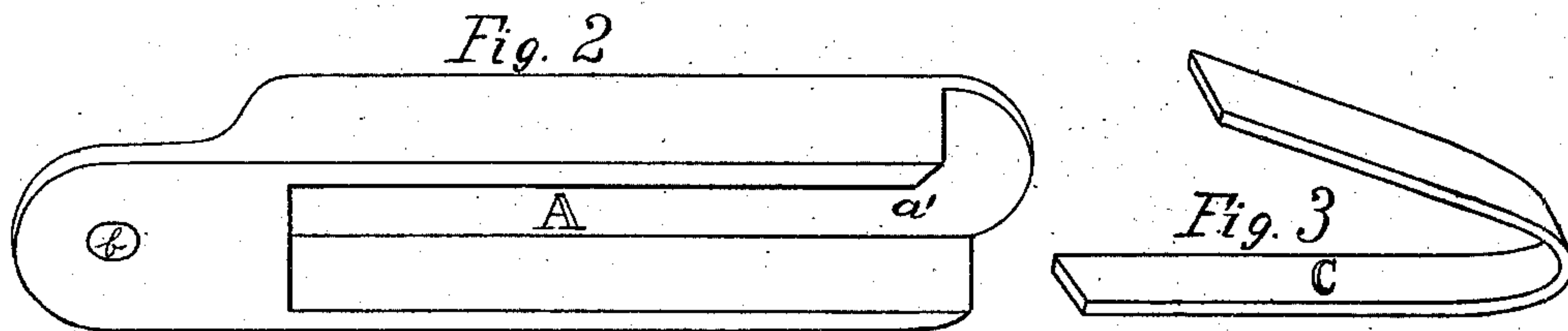
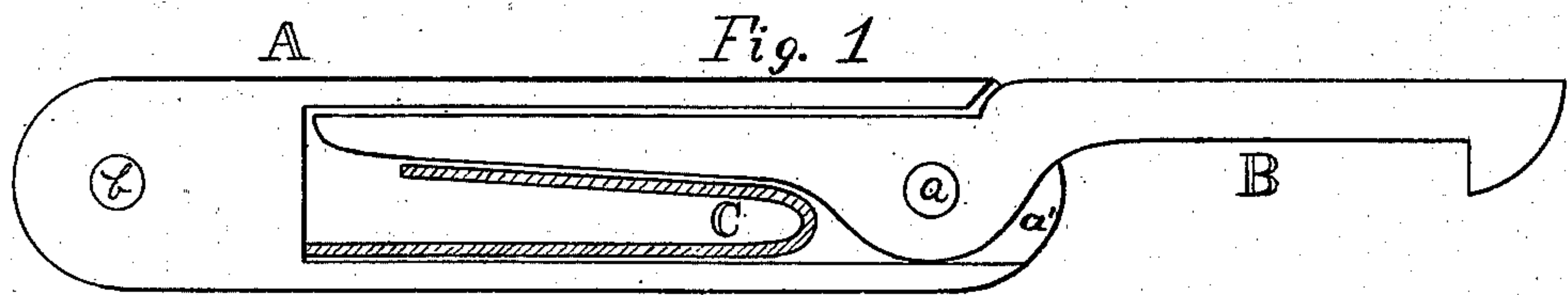


F. A. HAVENS.
WAGON END-GATE CATCH.

No. 192,989.

Patented July 10, 1877.



Witnesses.

John A. Curry.
John Harrison

Inventor.

Frederick A Havens
per John Watson
att'y

UNITED STATES PATENT OFFICE.

FREDERICK A. HAVENS, OF WETHERSFIELD, CONNECTICUT, ASSIGNOR OF
ONE-HALF HIS RIGHT TO SAMUEL A. CASTLE, OF SAME PLACE.

IMPROVEMENT IN WAGON END-GATE CATCHES.

Specification forming part of Letters Patent No. **192,989**, dated July 10, 1877; application filed
February 6, 1877.

To all whom it may concern:

Be it known that I, FREDERICK A. HAVENS, of Wethersfield, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Wagon End-Gate Catches and Fasteners; and to enable others skilled in the art to make the same, I will now proceed to describe them, referring to the drawings.

The same letters indicate like parts in each of the figures.

In the accompanying drawings, the shell or case is indicated by the letter A. The catch is marked by the letter B, the spring by the letter C, the end-gate by the letter D, the side of the wagon-body by the letter E, and the bolt, which serves as a fulcrum, by the letter *a*.

The object of this invention is to produce a fastener or catch for the end-gate of wagons, which will possess the necessary strength and durability to do its work, yet be neat and serviceable in all the details of its construction.

It consists of the metallic case or shell A, recess *a'* on one side, and at one end the catch B, the middle part of which is made to fit the recess *a'* in the end of the case A, having one end fitted along the under side of the upper wall, and almost the entire length of the inside of said case. The lower side of this inner end of the catch B is made to taper a little from the middle portion to the end. The outer end of said catch is formed in the ordinary or common way. The spring C is placed in the recess in case A, its lower and longer arm resting upon the lower wall, and its end

striking against the end wall of said recess. While its upper and shorter arm presses against the tapering or lower side of the inner end of the catch B, holding it in position, the bolt *a*, which passes through the case and catch near the open end of the former, and in the middle of the latter, serves as a fulcrum, on which the catch B operates, and also in part to fasten the whole device to the wagon-body. The upper and lower lips of the recess in the end of the case A are made alike, so that by reversing the catch B the device may be used on either side of the wagon-body.

The device is attached to the wagon-body by the bolts *a b* and the nuts *x v*, the open or recessed side of the case A fitting closely against the wood-work of the wagon-body, thereby entirely inclosing the inner end of the catch B and the spring C, as shown in Fig. 5.

The case and catch may be made from any kind of metal, either wrought or cast; and the spring may be either metal or rubber, and of any suitable shape.

Having thus described my invention, what I desire to secure by Letters Patent is—

1. The spring and latch case A, recessed as herein described, and adapted to be used upon either side of a wagon, substantially as and for the purposes set forth.

2. In combination with case A, having recess *a'*, the pivoted latch B, and spring C, constructed and combined substantially as and for the purposes set forth.

FREDERICK A. HAVENS.

Witnesses:

ELIJAH ASHLEY,
JOHN HARRISON.