

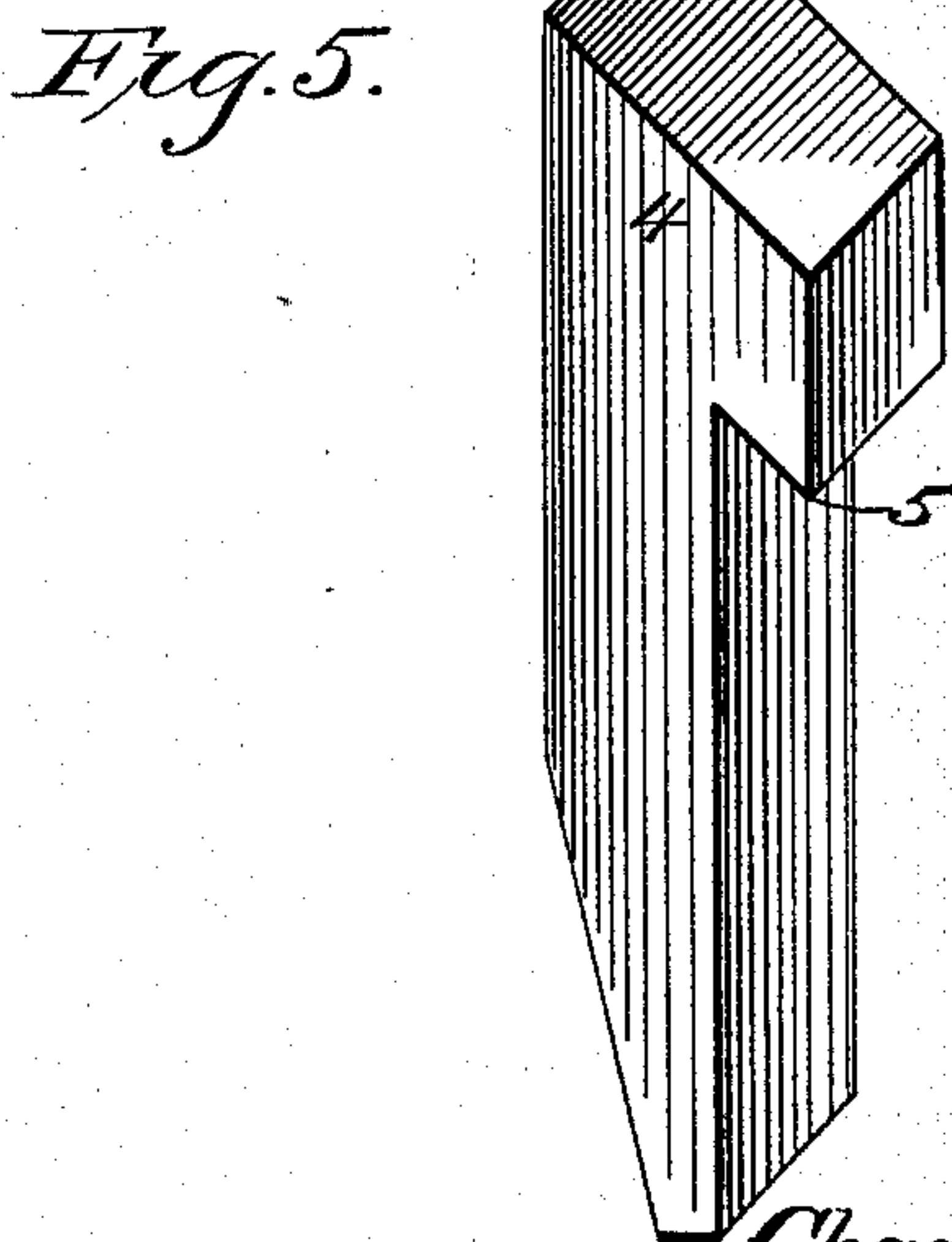
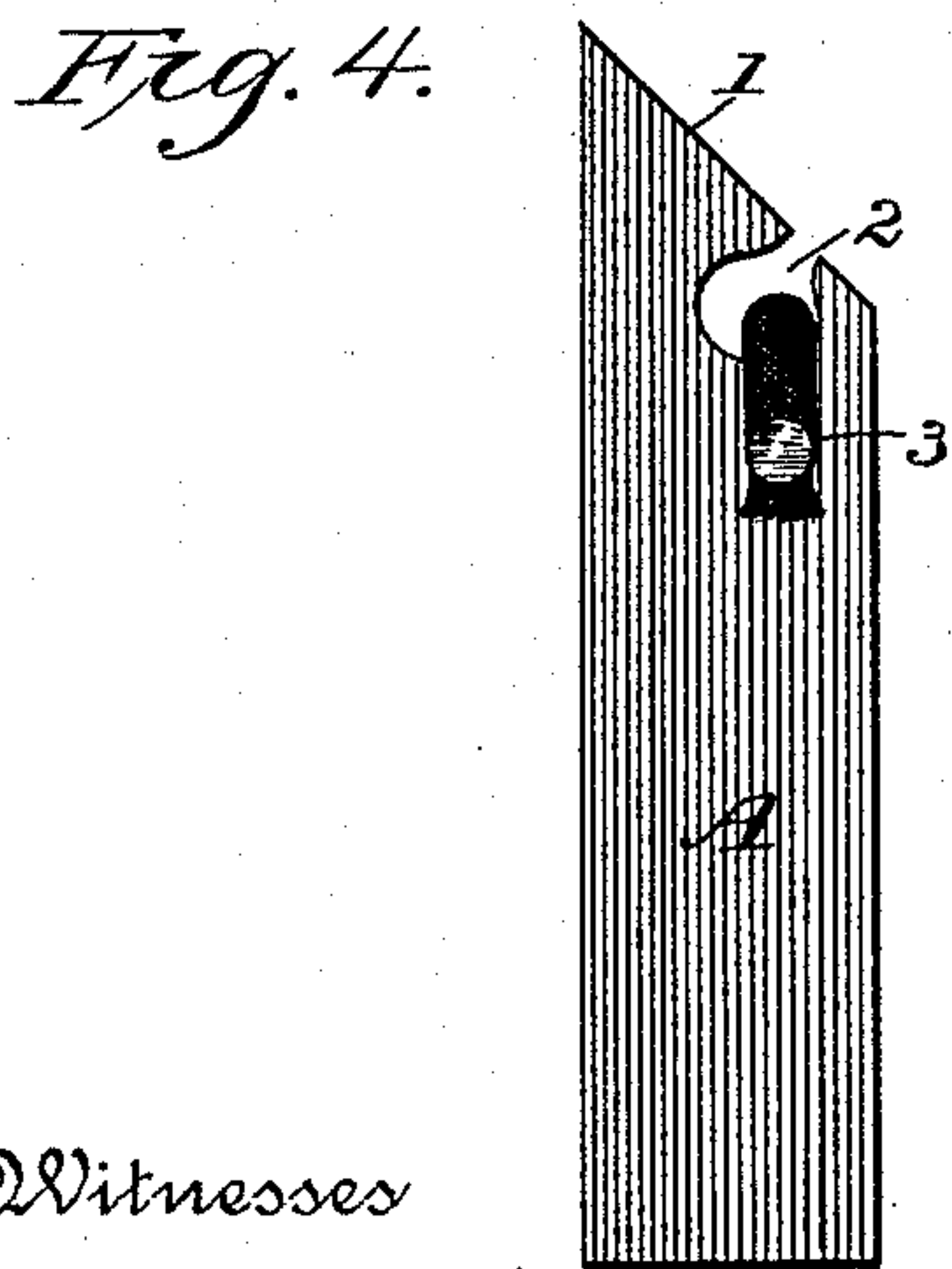
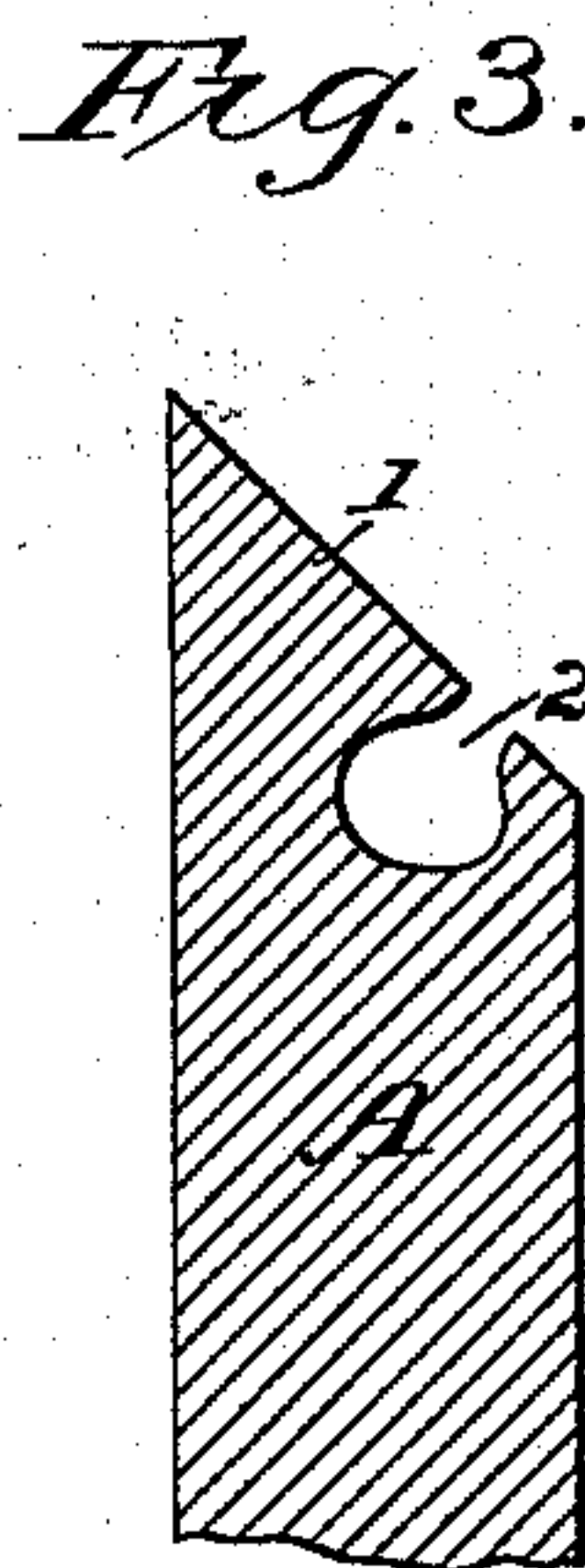
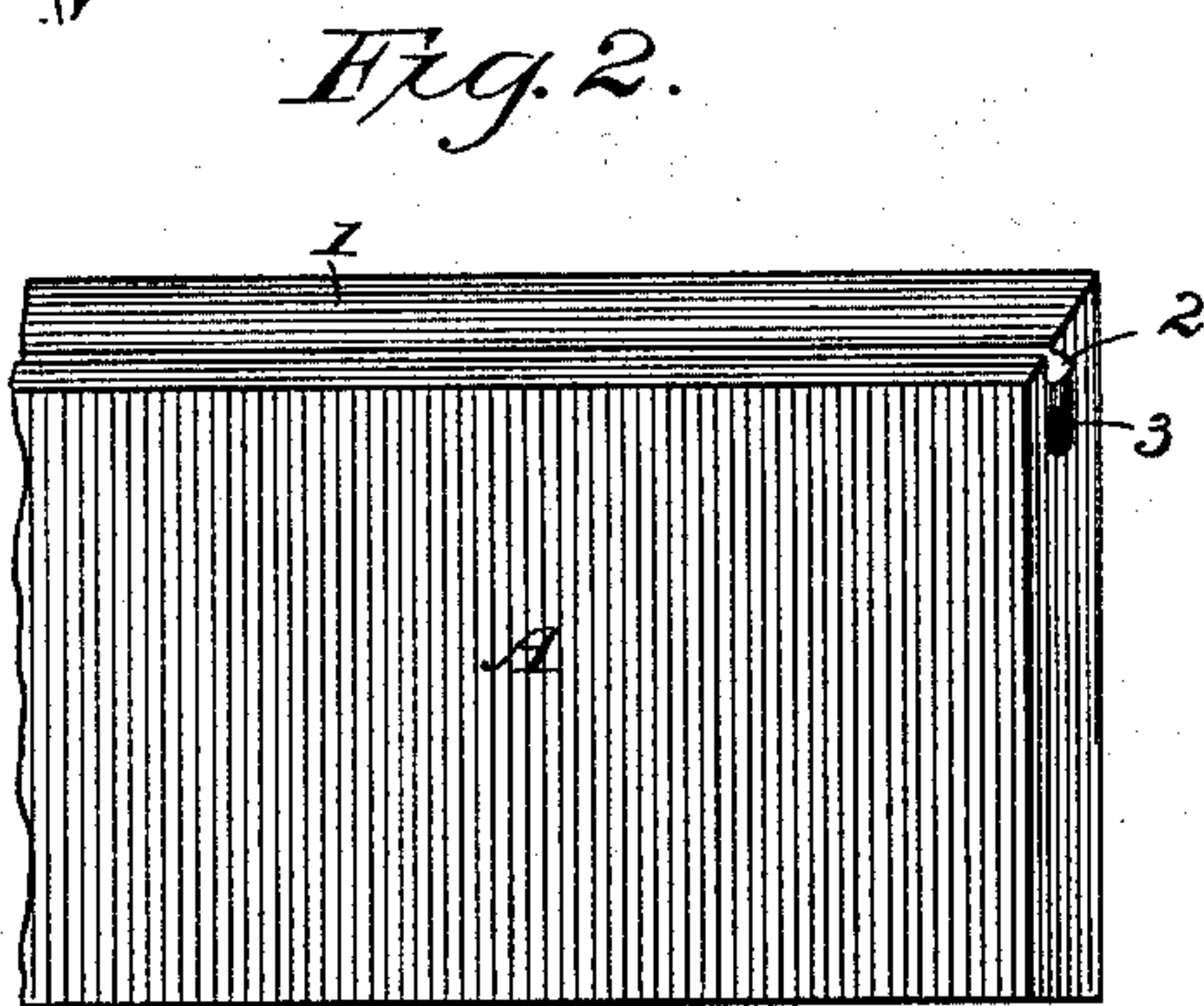
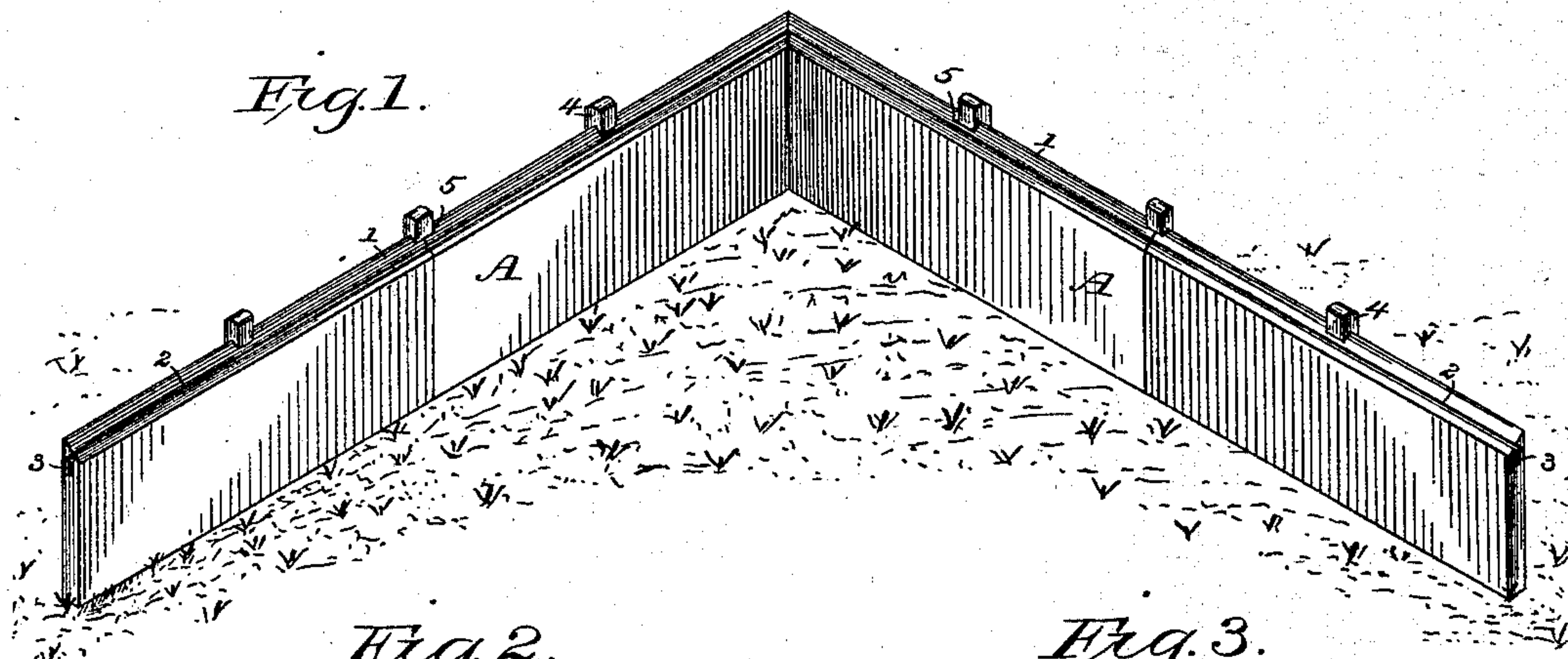
(No Model.)

C. B. HALSTEAD.

COMBINED FENCE AND INSECT DESTROYER.

No. 413,507.

Patented Oct. 22, 1889.



Witnesses

Wm. Messer.
B. W. Sommers.

Inventor

Charles B. Halstead
By his Attorney
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UNITED STATES PATENT OFFICE.

CHARLES B. HALSTEAD, OF HUMBOLDT, KANSAS.

COMBINED FENCE AND INSECT-DESTROYER.

SPECIFICATION forming part of Letters Patent No. 413,507, dated October 22, 1889.

Application filed April 8, 1889. Serial No. 306,346. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. HALSTEAD, a citizen of the United States of America, residing at Humboldt, in the county of Allen and State of Kansas, have invented a new and useful Fence and Insect-Destroyer, of which the following is a specification.

My invention has relation to means for preventing the approach or egress of destructive insects to growing crops and for destroying such insects.

My invention, therefore, consists in a fence or inclosure of particular construction having combined therewith an insecticide, as herein- after will be fully described, and specially as the same is particularly pointed out and distinctly claimed.

I have fully illustrated my improvements in the accompanying drawings, wherein—

Figure 1 is a perspective of my invention applied as a closure for surrounding and protecting a growing crop. Fig. 2 is a detail view of a panel or section of the fence. Fig. 3 is a vertical section of the panel, showing the form of the groove to receive the saturable material and the inclined upper edge. Fig. 4 is an end view of a section or panel, showing the manner of securing the ends of the saturable material. Fig. 5 is a perspective of one of the posts or fastening-pins.

A designates the panels or sections composing the fence. These are made of common board stuff of from two to three to four inches high, having their upper edges well slanting or inclined, as shown in the drawings at 1, and in this inclined edge is formed a groove 2, made larger at the lower portion or bottom than at the top, as shown at 2. The incline of the edge makes it difficult for the insects, under any circumstances, to climb over the section, and the enlargement of the groove at the bottom gives room for larger strands of the saturable material, and when packed makes it more secure than when arranged in an open even side groove. The amount and area of evaporating-surface is also greater by this construction and the concentration of the vapors attained by forcing them to be emitted through a contracted slot. In the groove is packed some textile material suitable to absorb and retain a liquefied insecticide, such textile material being a small rope or other

strand material offensive or obnoxious to insect life, such as coal-oil. These fences are portable and removable when their purposes for the season have been accomplished. Therefore to insert a strand of the saturable material through or in consecutive sections of the fence necessitates the removal of the strand whenever the fence is moved or taken up, and may render the material useless. To remedy this defect and inconvenience I groove or countersink the ends of the sections, as at 3, sufficient to receive the ends of the saturable material, and, laying the ends in this groove, fasten them with a small double tack or a headed tack, as shown. This makes the strand and the fence fast together and yet permits the meeting ends of the sections to meet snugly and tight to prevent the escape of the insects through the cracks. The ends of the meeting corner sections are mitered to suit the angle and make a good joint at the corners, substantially as shown.

C are the posts or fastening-pins. These consist of substantial pins having heads 4, with an overhanging lip 5 formed to fit over and on the inclined upper edge of the panels, substantially as seen in the drawings. This construction, it will be perceived, not only holds the fence down in place, but, because of the grip of the projecting part of the pin-head on the edge of the fence, holds the panel firm in its upright position.

To lay the fence the sections are arranged on the ground and pressed firmly in place so as to prevent the bugs from getting under them, and then the fastening-pins are driven down tight in such places as desirable.

The saturable material having been inserted and secured before the panels are laid, the fluid may, if not already done, be applied after the fence has been laid.

On nearing the fence the bugs are warned by the vapors evolved from the insecticide and are turned back from their course; or if, in their persistence, they reach the top of the fence, they are overcome before they can escape, and tumble back down the incline in the direction of their approach.

My invention is particularly useful in destroying the devastating chinch-bug.

It will be perceived that a volatile substance having the requisite noxious or toxic

properties may be deposited in the grooves independently of the saturable material and serve the purpose intended, the enlarged and extended bottom surfaces of the grooves and
5 their comparatively contracted openings making them particularly suited to such position.

Having thus described my invention so particularly as to distinguish it from existing patented devices of the class, I now proceed
10 to particularly point out what I claim as my invention, as follows:

1. The insecticide-fence herein described, composed of sections of single narrow boards having their upper edge formed at an incline,
15 and a groove in said inclined edge made larger at the bottom than at the opening, to receive and sustain an insecticide, and fastening-pins formed with projecting heads having lips formed to fit over the inclined edge of
20 the sections, substantially as described, and for the purpose specified.

2. The insecticide-fence herein described, composed of abutting sections of single narrow boards having their upper edges formed at an incline, a groove in said inclined edge,
25 seats or countersinks in the end faces of the sections, a saturable material arranged in each section, with the ends projecting beyond the ends of the sections and arranged and secured in the end countersinks thereof, and
30 posts having heads projecting on and over the inclined edges of the sections, substantially as described, and for the purpose specified.

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

CHARLES B. HALSTEAD.

Attest:

E. N. WEST,
J. S. PEERY.