

J. ORIN.

Improvement in Insect-Destroyers.

No. 131,116.

Patented Sep. 3, 1872.

Fig. 1.

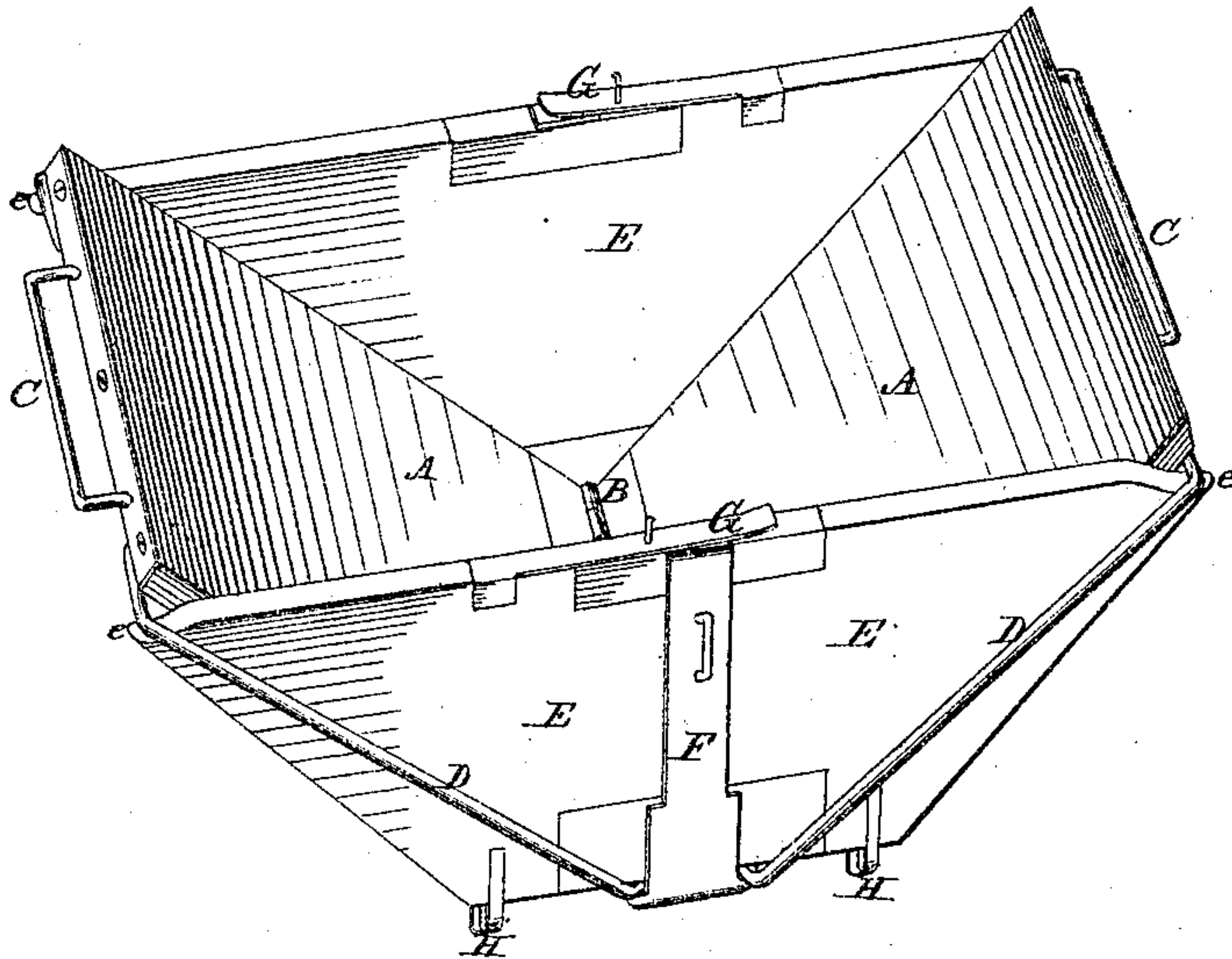
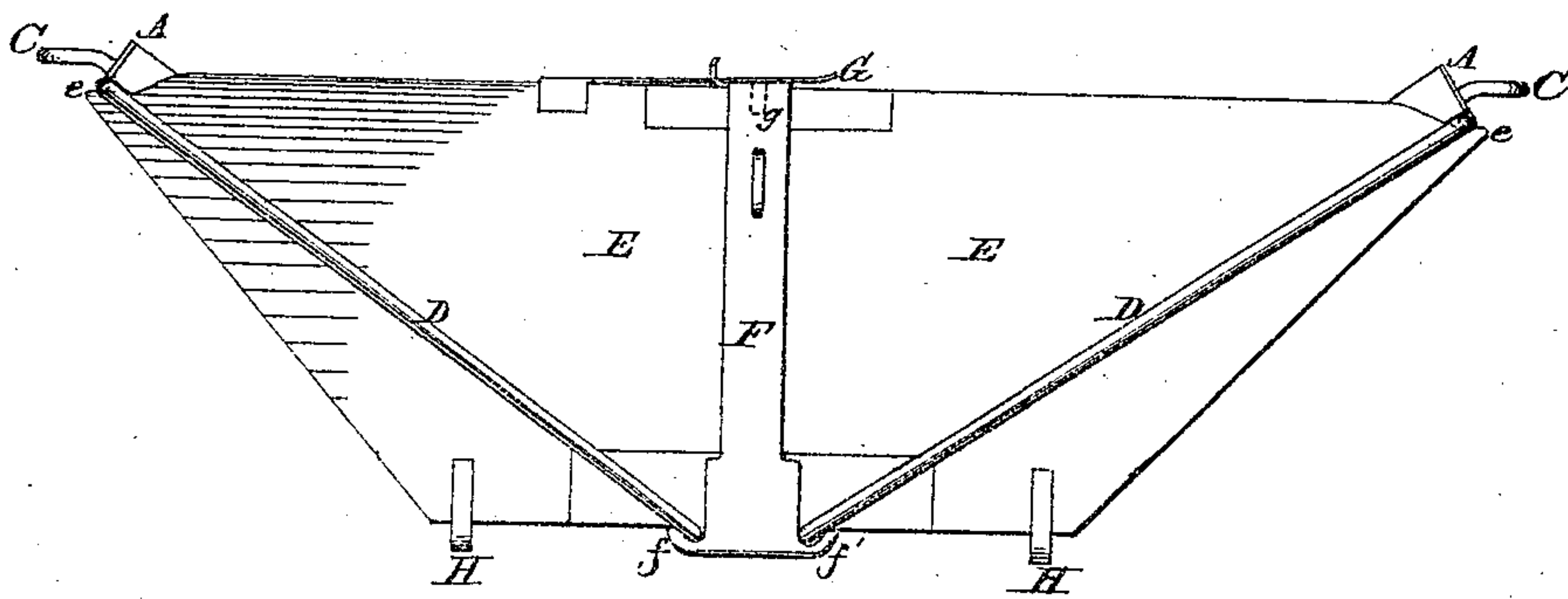


Fig. 2.



Witnesses:

Mumford
John R. Young

Inventor:

James Orin, by
Orin & Co., his Attys

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Fig. 3.

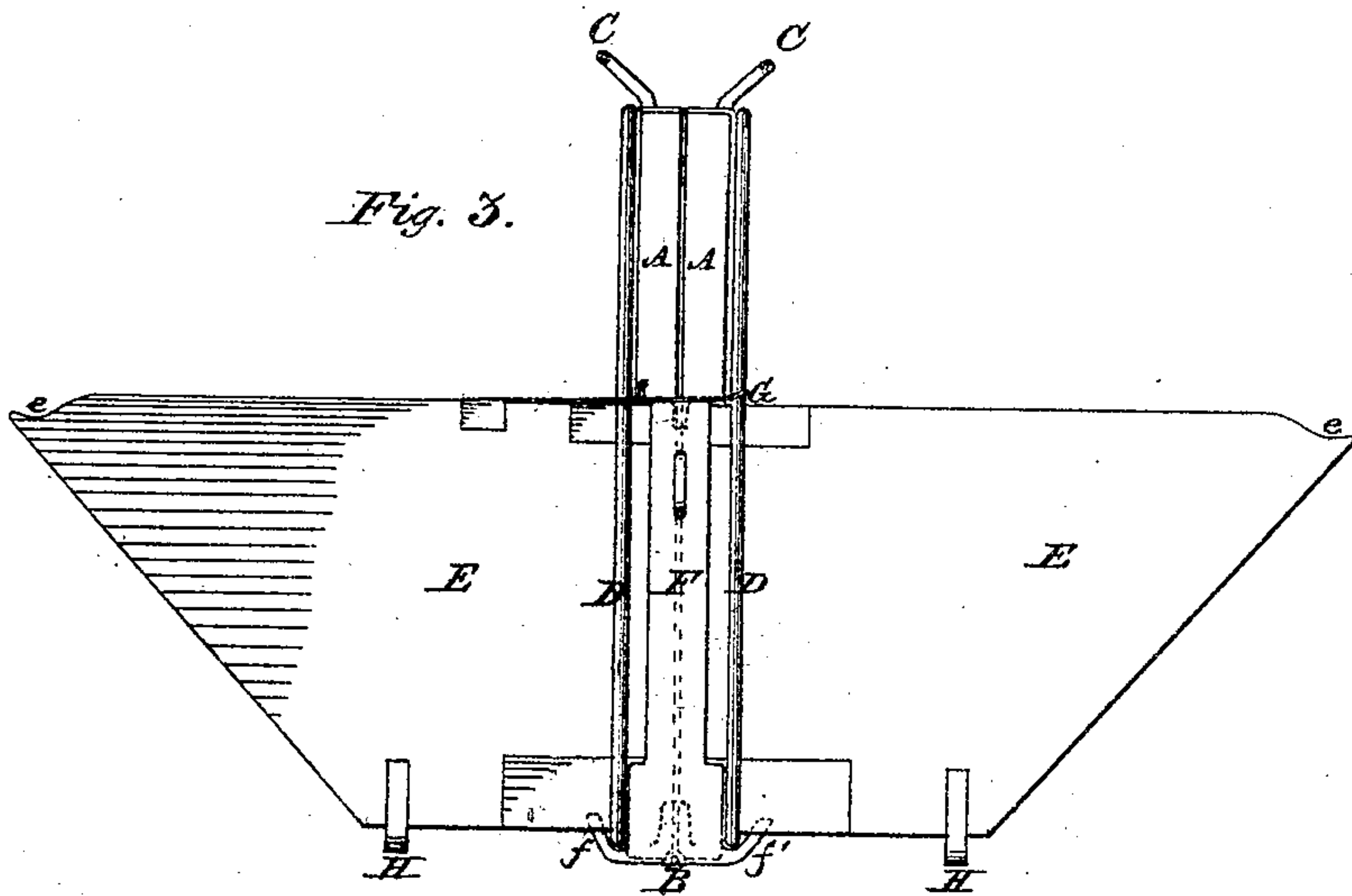


Fig. 4.

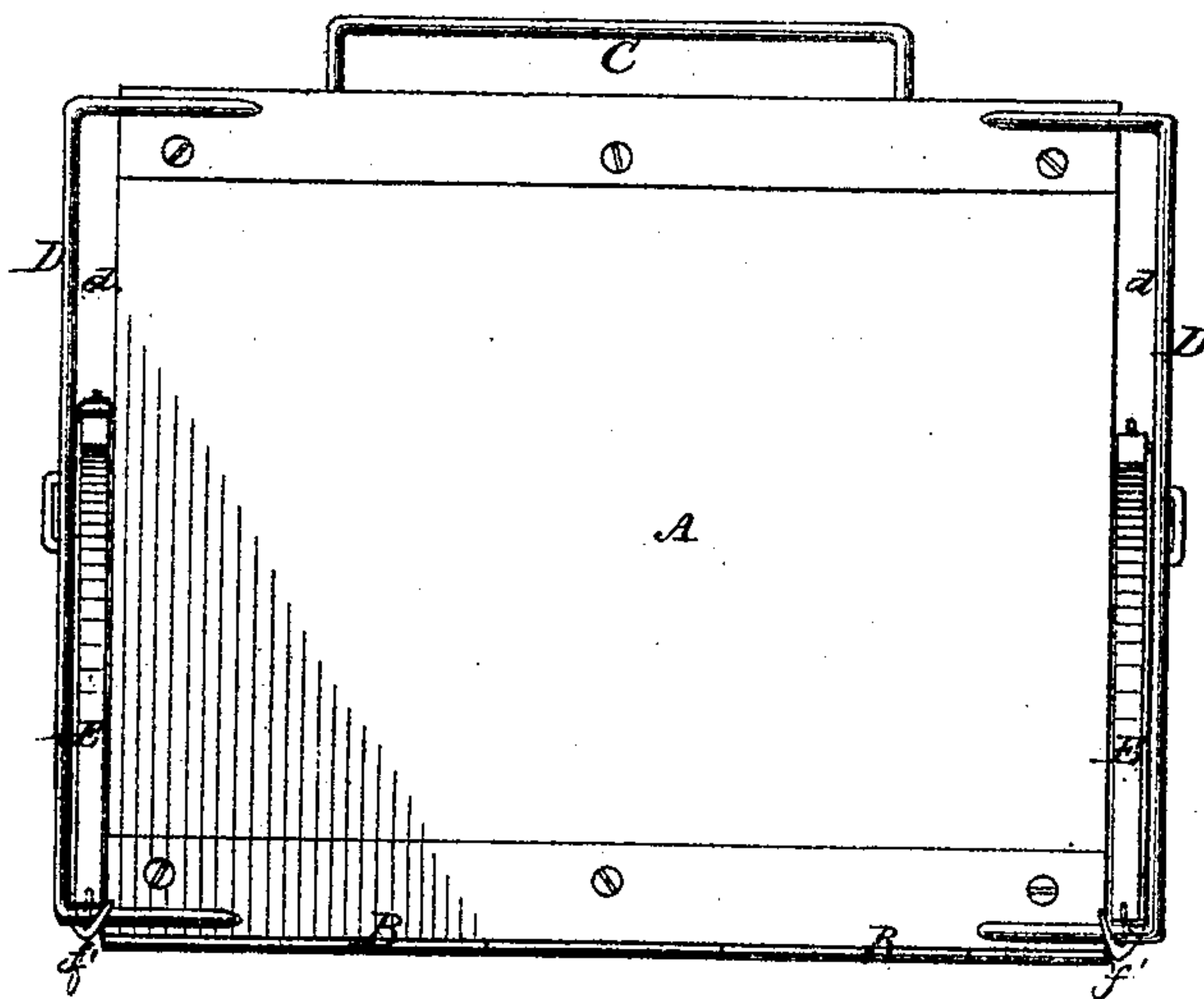
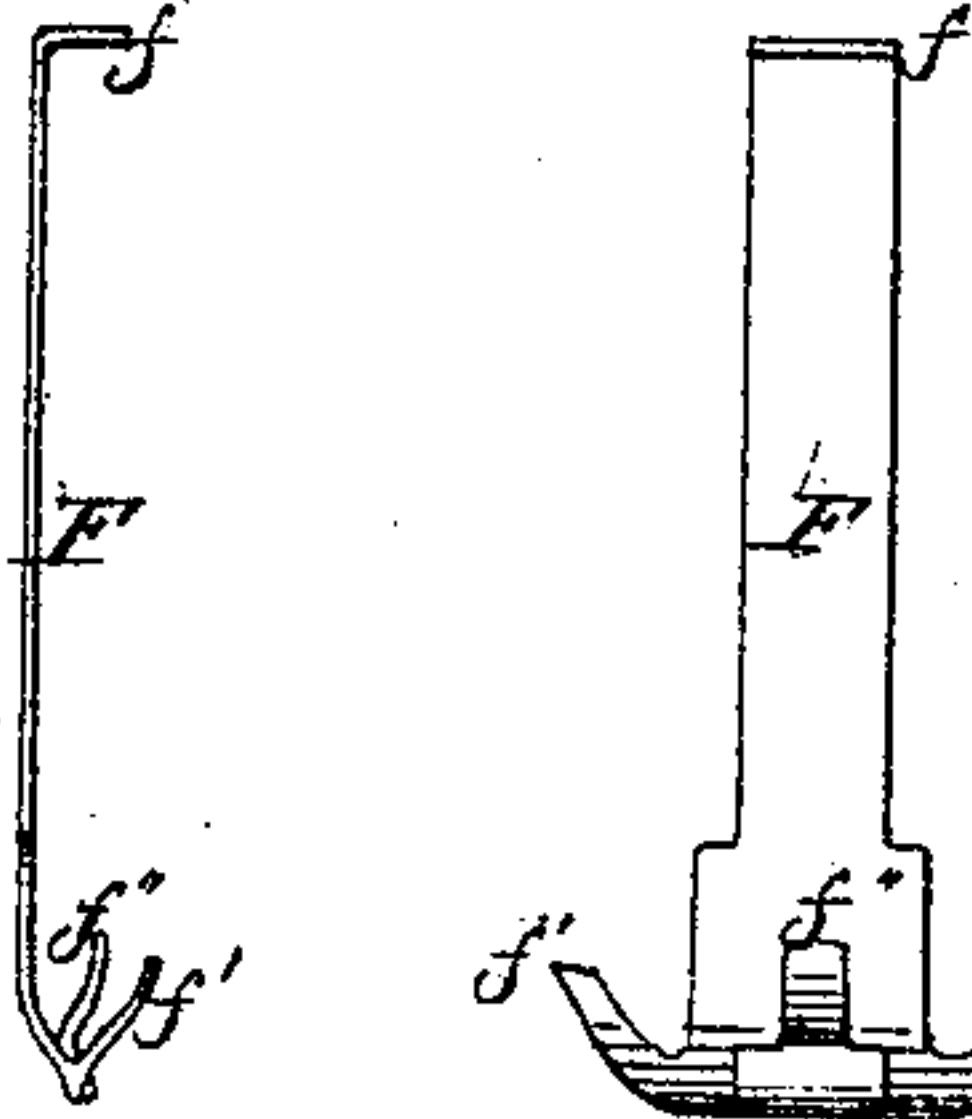


Fig. 5.



Witnesses:
James H. Prindle
John R. Young

Inventor:
James Orin, by
Prindle & Co. his attys

UNITED STATES PATENT OFFICE.

JAMES ORIN, OF DAYTON, OHIO.

IMPROVEMENT IN INSECT-DESTROYERS.

Specification forming part of Letters Patent No. 131,116, dated September 3, 1872.

To all whom it may concern:

Be it known that I, JAMES ORIN, of Dayton, in the county of Montgomery and in the State of Ohio, have invented certain new and useful Improvements in Insect-Traps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of my device as arranged for use. Fig. 2 is a side elevation of the same. Fig. 3 is a like view of said device with its wings closed. Fig. 4 is an end elevation of the same with said wings closed; and Fig. 5 is an edge view and an elevation of the inner side of the keeper used for connecting the side pieces and wings.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to provide a simple, effective, and cheap means whereby insects, more especially those which infest potato-vines, may be destroyed, and to this end said invention consists, principally, in the device as a whole, when its parts are constructed and combined substantially as and for the purpose hereinafter shown. It consists, further, in the means employed for connecting the sides to or with the hinge of the wings, substantially as and for the purpose hereinafter shown.

In the annexed drawing, A and A represent two rectangular pieces of thin board, connected together at one end by means of a hinge, B, and each provided at or near their opposite ends with suitable projecting handles C, constructed, preferably, of or from large wire. Secured to the outer side of each wing A, at its edge and near each end, is a metal rod, D, which extends transversely outward to a point about one-fourth of an inch from said edge, and thence inward along or parallel with the same, so as to form between said rod and the edge of said wing a slot or space, *d*, having a width of about one-fourth of an inch, and a length nearly equal to the length of said wing. Within the corresponding openings *d*, upon each side of the wings, is placed a strip of board, E, the upper edge of which is straight to a point near each end, from which it extends outward and downward and thence out-

ward again, so as to form a shoulder, *e*, which, when said wings are opened outward, receives and engages with the lateral arm of the rod D, so as to prevent said rod and its wing from passing further outward and downward. From its upper outer corners, each side board E slopes downward and inward, so as to reduce the length of its lower edge until just sufficient to furnish a firm bearing for the device. In order that the side boards E may be so connected to or with the hinge-joint of the wings as to cause them to preserve their relative vertical positions, the following-described means are employed: A thin strip or bar of metal, F, having a length slightly greater than the depth of the side boards, is provided at its upper end with a right-angled projection, *f*, and at its lower end and edges with two laterally outward, upward, and inward projecting arms, *f'*, while a third arm, *f''*, extends upward and slightly inward from its lower end and transverse center. The strip thus formed is placed upon or against the outer face of a side board with the offset *f* resting upon the upper edge of the latter, the arm *f''* contained within a suitable recess or slot formed within the lower edge of the same, while the arms *f'* pass from without around the lower lateral arms of the rods D and in rear of the lower edge of said side board. The upper end of each strip or keeper bar F is locked in place by means of a spring, G, which is secured to or upon the upper edge of the side board and, extending over the offset *f*, is provided with a stud or pin, *g*, which projects downward through a corresponding opening in said offset and into said side boards beneath the same. When thus combined the keeper-bars confine the wings and side boards in relative vertical positions without in the slightest degree interfering with the free radial movement of said wings. When it is desired to disconnect the parts, the spring G is raised so as to release the upper end of the keeper-bar, the latter dropped downward and the side board moved endwise. Four feet, H, placed near or at the lower corners of the side boards, complete the device, the operation of which is as follows:

The wings are spread outward to their furthest point, and the device placed upon the

ground directly beneath the vines or plants infested with the insects to be destroyed. The vines or plants are next bent over the trap and shaken so as to cause the insects to fall into the same, after which, by closing together the wings, said insects are crushed, the operation described being performed upon or in connection with each vine or plant. It will be seen that by use of the side pieces the insects shaken into the trap are effectually prevented from escaping at the sides, being held in place until the closing wings crush them.

Having thus fully set forth the nature and merits of my invention, what I claim as new, is—

1. The hereinbefore-described insect-trap, consisting of the hinged wings A and side

boards E, connected together by means of the guide-rods D and the keeper-bars F, *f*, *f'*, and *f''*, substantially as and for the purpose specified.

2. The keeper-irons F provided with the offset *f* and arms *f'* and *f''*, and combined with the side boards E, the rods D, and the spring-catch G and *g*, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of June, 1872.

JAMES ORIN.

Witnesses:

SUMNER T. SMITH,
CHAS. C. WILLIAMS.