

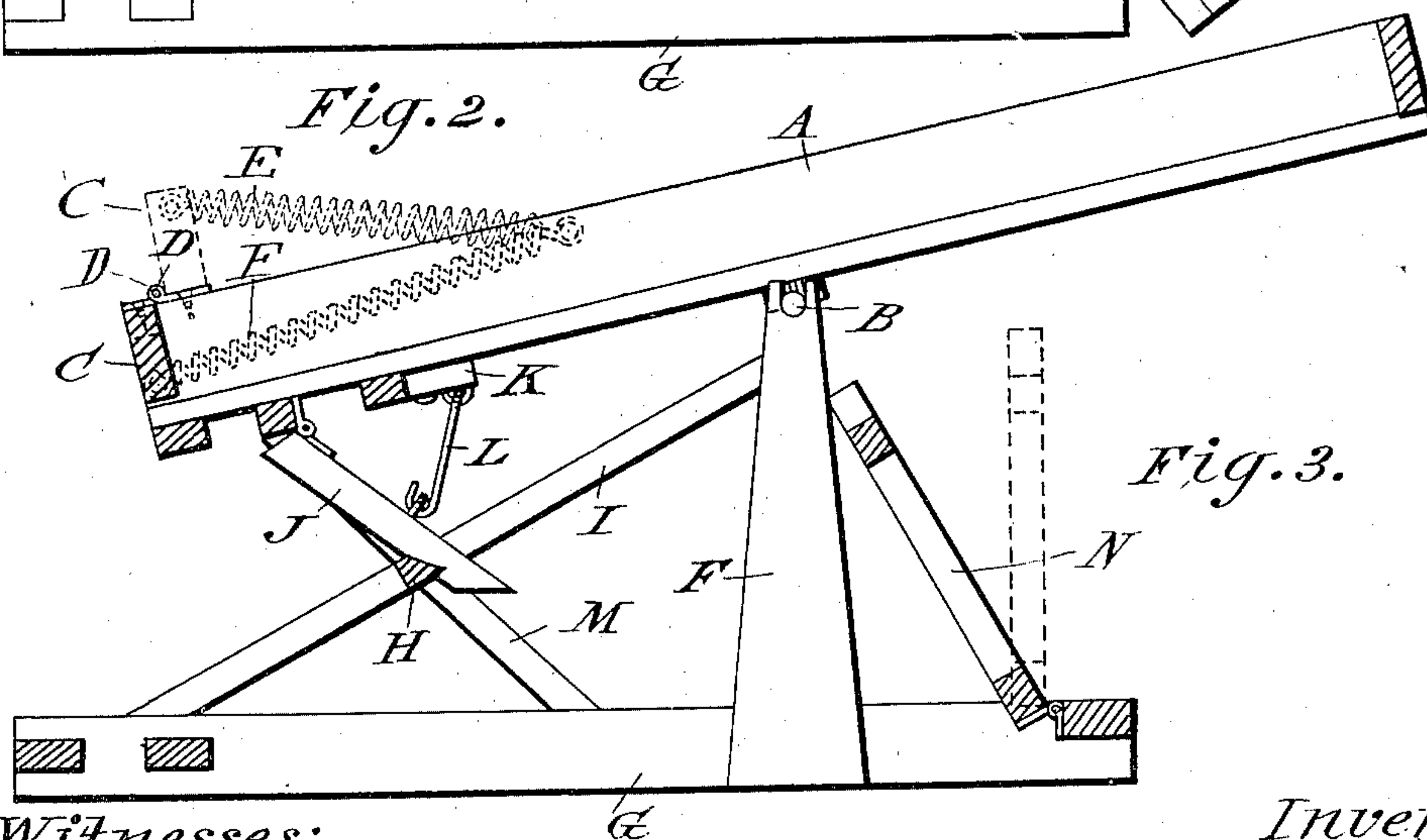
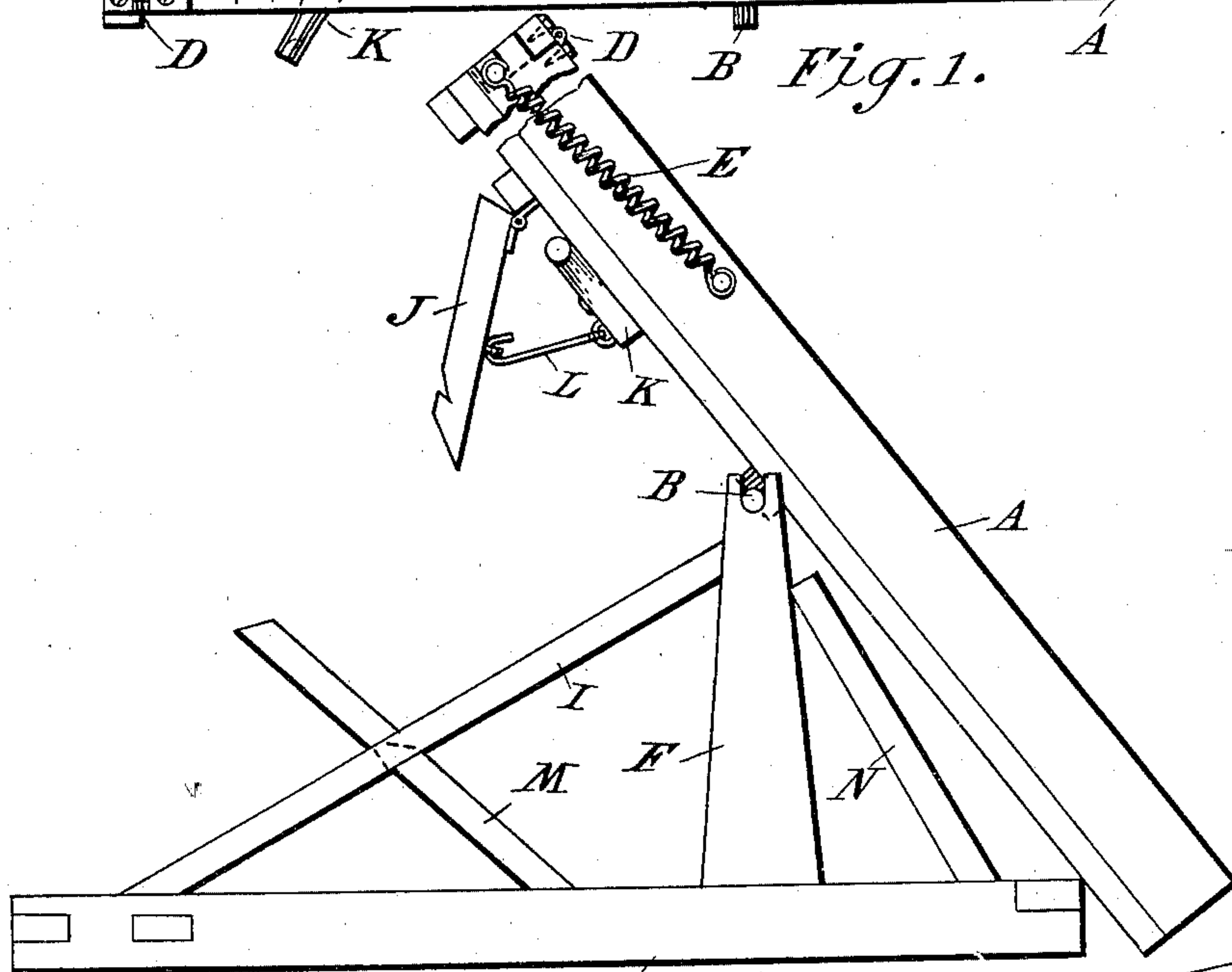
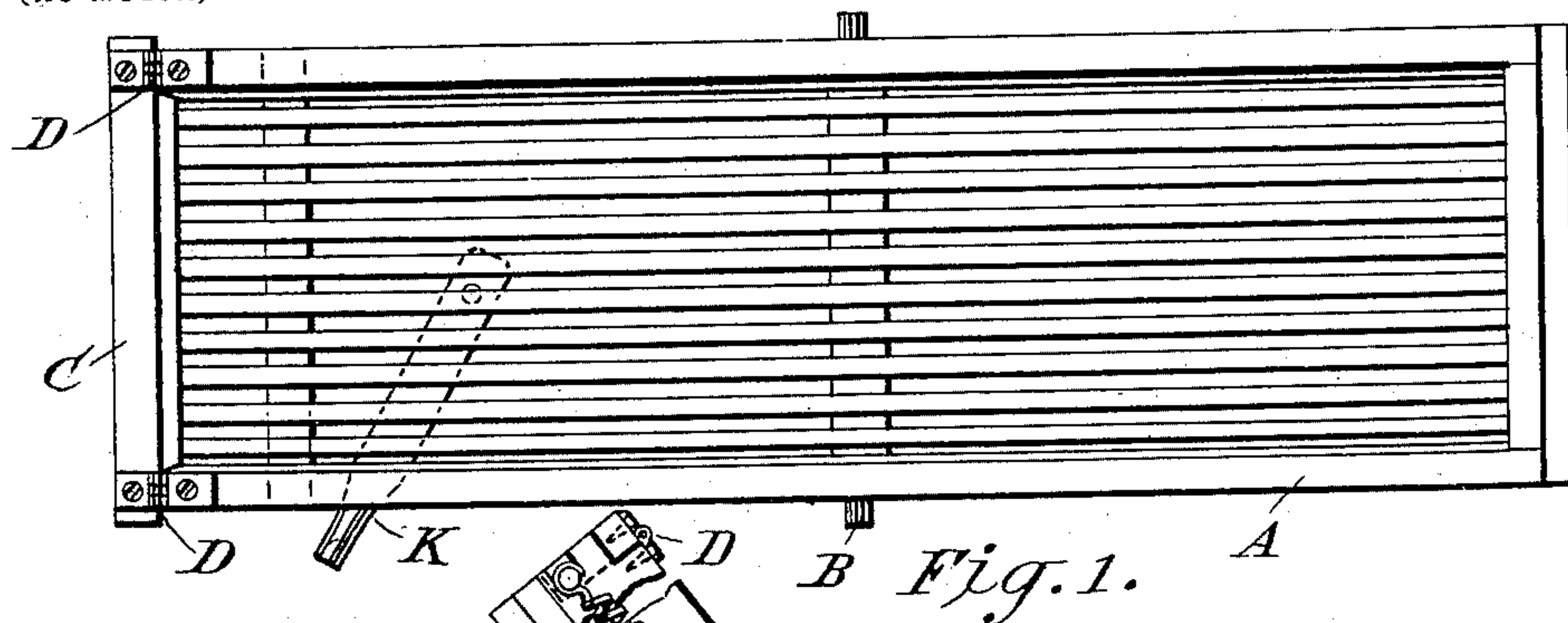
No. 656,637.

Patented Aug. 28, 1900.

W. H. GILMORE.
POTATO SORTER AND CLEANER.

(Application filed Feb. 5, 1900.)

(No Model.)



Witnesses:
Edward L. Mills.
Palmer A. Jones.

Inventor:
William H. Gilmore
By Luther V. Moulton
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM H. GILMORE, OF GREENVILLE, MICHIGAN.

POTATO SORTER AND CLEANER.

SPECIFICATION forming part of Letters Patent No. 656,637, dated August 28, 1900.

Application filed February 5, 1900. Serial No. 3,952. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GILMORE, a citizen of the United States, residing at Greenville, in the county of Montcalm and State of Michigan, have invented certain new and useful Improvements in Potato Sorters and Cleaners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in potato sorters and cleaners; and its object is to provide the same with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of the box of the device; Fig. 2, a side elevation of the device entire; and Fig. 3, a longitudinal section of the same, showing the open position of the end C in dotted lines.

Like letters refer to like parts in all of the figures.

A represents an oblong rectangular box having a bottom composed of parallel longitudinal slats having suitable spaces to permit the passage therethrough of the smaller potatoes, together with all sand, earth, and other small matter that may be mixed with the potatoes, said box being provided with a trunnion B at each side and having an end wall hinged to the box at the top, as at D, and adapted to swing outward to discharge the contents of the box and to swing upward to reverse position when fully open and held closed or open, as the case may be, by a contractile spring E, pivotally attached to the side of the box at one end and to the end C at the other end. A suitable base-frame G is provided, having attached posts F, recessed at the upper end to receive the trunnion B and pivotally supporting the box A. A transverse bar H is supported between the braces I, and a suitable hook J is pivotally attached to the bottom of the box and operated by means of a lever K and connecting-rod L, and adapted to engage the bar H and hold the box in an inclined position, as shown in Fig. 3, the lower end of the box being supported by props

M, also attached to the braces I. Near one end of the bed-frame is a suitable frame N, hinged at its lower side to a cross-bar of the bed-frame and adapted to be raised to a vertical position, as shown in dotted lines, to engage the bottom of the box A and hold the same in an oppositely-inclined position. The frame N when turned down against the posts F permits the box A to swing down to an angle of about forty-five degrees, with the lower end in contact with the end of the base-frame G, as shown in Fig. 2.

The operation of my device is as follows: When it is used to clean and sort potatoes that have been placed in bags, which bags are located on the ground or floor supporting the frame G, the box is first turned to the position shown in Fig. 2 and the bag placed in the lower end thereof, with the mouth of the bag uppermost. As the box is tilted to the position shown in Fig. 3, the bag and contents of the same are elevated and the contents discharged from the bag into the box and the bag then removed. By vibrating the box upon its pivots the particles of sand or soil and also the smaller potatoes will pass through the openings in the bottom of the box, and then the box is turned and secured in the position shown in Fig. 3 by engaging the hook J with the bar F. A suitable basket can then be placed under the lower end of the box and the end C opened to permit the potatoes to roll out into the basket and the entire described operation repeated.

In case the potatoes are to be shoveled into the device the frame M may be used to support the end of the box until a sufficient quantity has been placed in the same and then the operation completed as in the first instance. In the event that potatoes are to be shoveled from a wagon or other elevated position into the box or otherwise discharged into the same the box may be held in the position shown in Fig. 3 and the lower end wall C turned up a half-revolution on its hinges, as shown in dotted lines in Fig. 3, when the spring E by its contractile action now will hold the same open, and the potatoes will then roll down the entire length of the bottom and freely escape at the lower end of the box, and thus be properly sorted and cleaned on their

passage from the upper end of the box to the lower end of the same and be at once discharged into a suitable basket or other receptacle placed below the lower end of the box.

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

1. The combination of a box having a screen-bottom, a frame pivotally supporting the box near the middle thereof, a hook attached to one end of the box and engaging a portion of the frame to hold the box in an inclined position, and a pivoted frame to engage the other end of the box and support the same in an oppositely-inclined position, and to release the same and permit the box to assume a greater inclination, substantially as described.

2. The combination of a box having a screen-bottom, a frame pivotally supporting the box near the middle thereof, a cross-bar on the frame, a hook pivoted to the box and engaging the cross-bar, a lever pivoted to the box, and a rod connecting the lever and the hook, substantially as described.

3. The combination of a box having a screen-bottom and pivotally supported near the middle, means for holding the box in an inclined position, an end wall hinged to the box and adapted to swing vertically to a reversed position, and a contractile spring pivotally at-

tached at its respective ends to the box and end, substantially as described.

4. The combination of a box having a bottom formed of parallel slats, a frame pivotally supporting the box near the middle thereof, props and a cross-bar on the frame, a hook on the box to engage the cross-bar, a lever pivoted on the box, a rod connecting the lever and hook, a pivoted frame, adapted to engage and support the box in an inclined position, and an end wall hinged to the box, substantially as described.

5. The combination of a box having a bottom composed of parallel slats, and also having trunnions near the middle, and a hinged end wall adapted to turn to reverse position, a spring pivotally connected to the box and end wall, a base-frame having posts recessed at the top, braces, props, and a cross-bar on the base-frame, at one end thereof, and a pivoted frame on the other end of the base-frame, a hook pivoted on the box and engaging the cross-bar, a lever pivoted to the box, and a rod connecting the hook and lever, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. GILMORE.

Witnesses:

J. T. RIDLEY,

EDWARD H. JONES.