

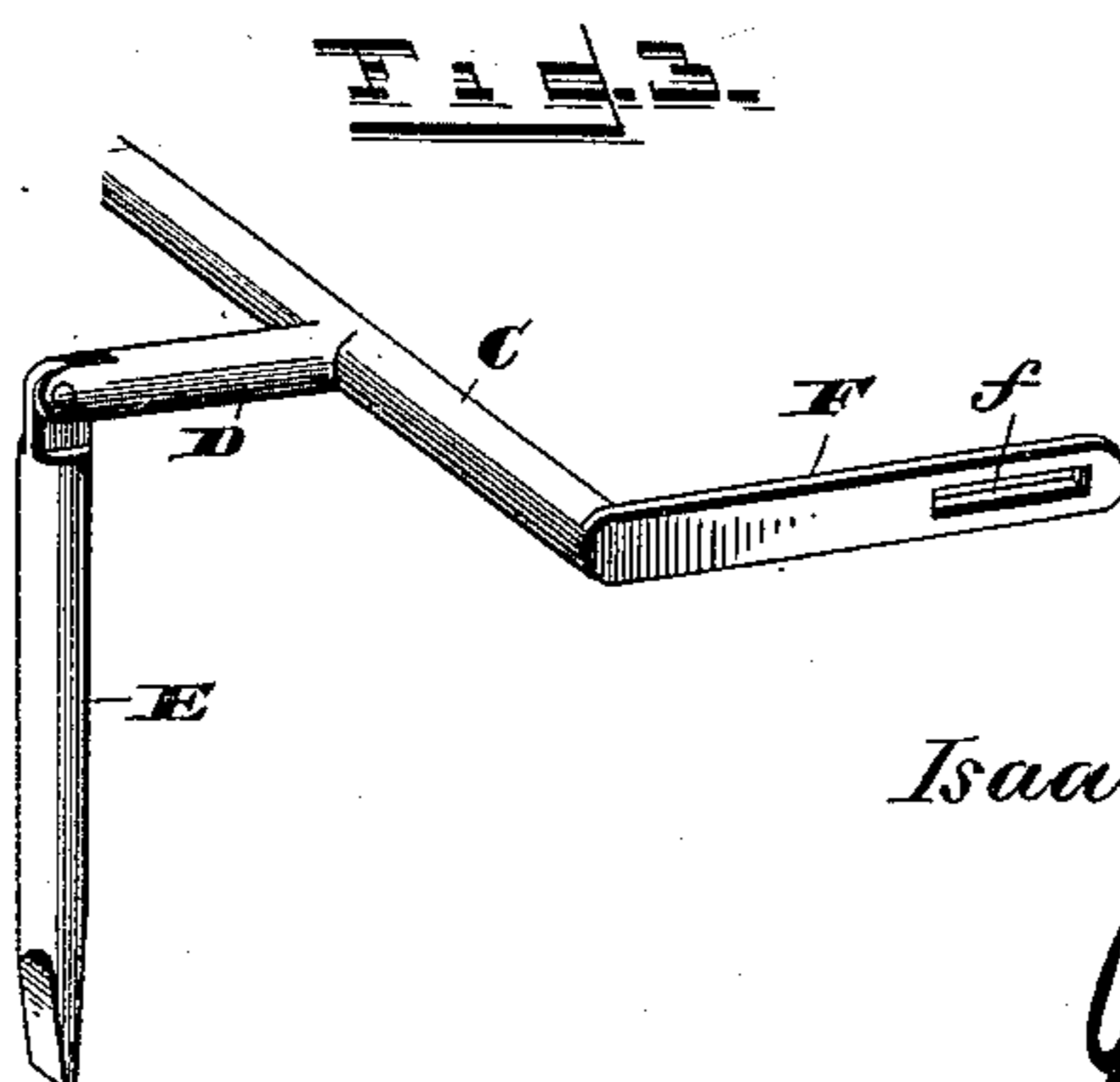
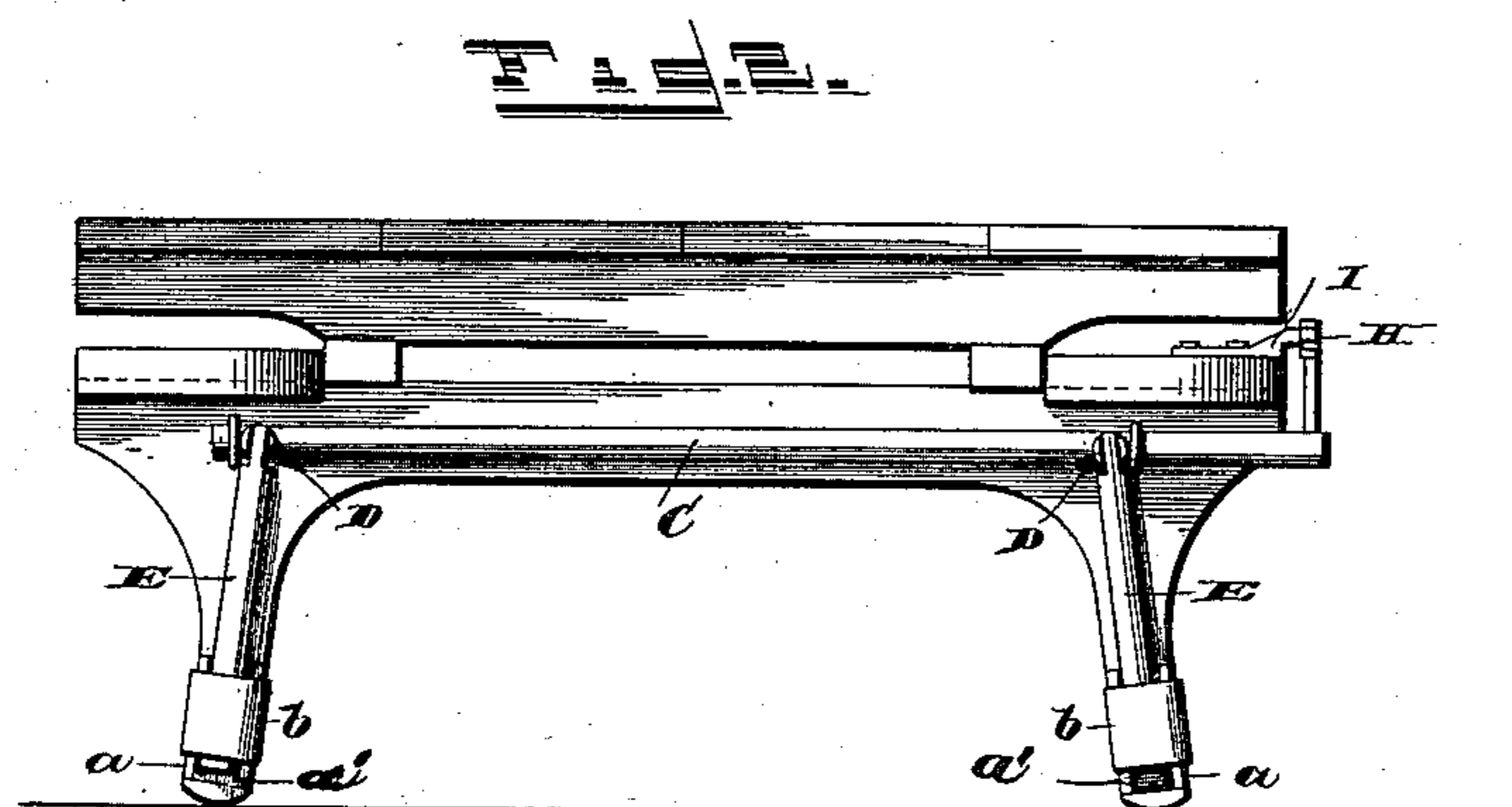
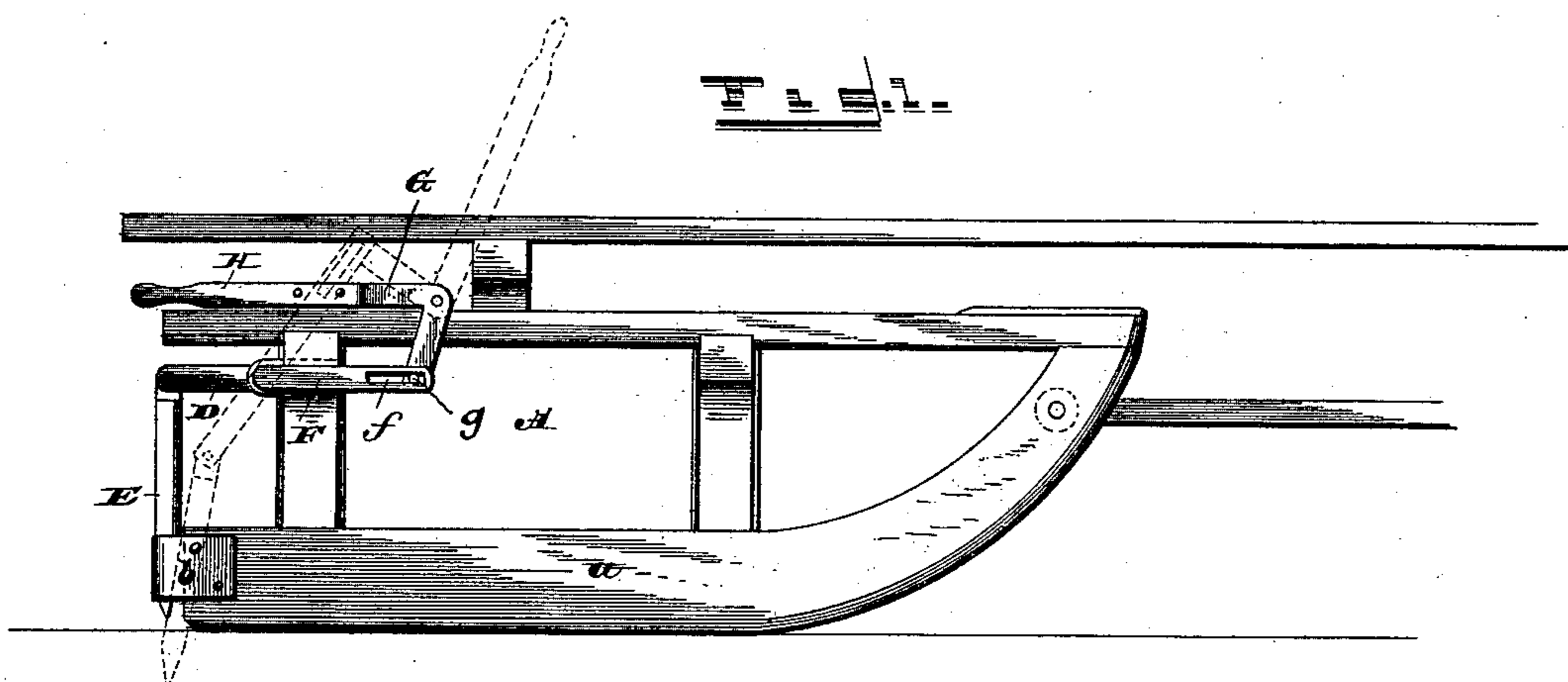
(No Model.)

I. C THOMPSON.

## SLED BRAKE.

No. 384,548.


Patented June 12, 1888.



WITNESSES.

WITNESSES,  
G. S. Elliott,  
E. M. Johnson.

*Isaac C. Thompson.*  
INVENTOR.

INVENTOR,  
  
Attorney.

# UNITED STATES PATENT OFFICE.

ISAAC C. THOMPSON, OF ANDREW, IOWA.

## SLED-BRAKE.

SPECIFICATION forming part of Letters Patent No. 384,548, dated June 12, 1888.

Application filed March 15, 1888. Serial No. 267,257. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC C. THOMPSON, a citizen of the United States of America, residing at Andrew, in the county of Jackson and State of Iowa, have invented certain new and useful Improvements in Sled-Brakes; 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, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in sled-brakes, which are designed to be used in checking the advance of the sled, also to hold the same from sliding backward when the team is stopped upon a hill or upgrade; and my invention consists in the special arrangement and construction of the parts, which will operate by a lever, so that the brake-dogs will be locked in an operative position, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side view of a sled, showing my improved brake attached thereto, the brake being shown elevated and locked in full lines and depressed in dotted lines. Fig. 2 is a rear view, and Fig. 3 is a detail perspective view.

A refers to the sled, which is provided at the rear ends of the runners *a* with metallic clips *b*, consisting of straps or bands of metal let into recesses in the runners. The rear ends of the runners are also formed with inclined grooves *a'*, to permit the dogs or brake-bars to assume an inclined position, as shown in dotted lines, Fig. 1.

To the rear cross-bar of the sled-frame, by means of suitable eyes or bearings, is secured a crank-shaft, C, which has formed integral therewith, at points almost immediately above the runners, projecting arms D D, the outer ends of which are bifurcated for the reception of the upper reduced ends of the dogs E, which are secured thereto by pivots. The bar or rock-shaft C has also formed on one end thereof, preferably at the right-hand side of the sled, a forwardly-projecting arm, F, on a line with

the arms D, the outer end thereof being slotted, as shown at *f*, and engaging with the pin *g* of the angle-iron G, which forms a part of the operating lever or handle H. The shape of the angle-iron G is shown in Fig. 1—viz., an acute angle. One member of the angle-iron G may form an operating-lever, though I prefer to attach an ordinary wooden handle thereto. This angle-iron is pivotally secured on the side of the sled by a casting, I, rigidly secured. The lower ends of the brake-dogs E are pointed to readily enter the snow or ground and impede the progress or movement of the sled in either direction when projected beneath the runners. When the lever is elevated, as shown in dotted lines, it will incline the bar F upwardly and throw the arms D D downwardly, the parts being so arranged that a lock is formed, so that pressure upon the brake-dogs will not raise the same, this locking being caused by the angles of the different parts, as shown. When it is desired to throw the dogs out of an operative position, the handle is depressed, which will raise the dogs and hold them in an elevated position. It will be observed that when the handle is either elevated or depressed the pin *g*, which operates in the slot *f*, is always at the front end of the slot.

I am aware that prior to my invention it has been proposed to operate brake-dogs for sleds by a lever; but in the greater number of cases it has been found necessary to provide the lever with auxiliary means for holding the same in position, as springs or locking-bars, geared segments, and analogous devices, and where such devices are not provided the operating-lever does not lie flat, but projects upwardly in the way when the brake-dogs are thrown out of an operative position.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a sled having runners whose rear ends are provided with oblique slots, of the rock bar or shaft secured thereto having integral slotted arms and operated by a lever, the brake-dogs attached to the said arms and working in the oblique slots in the ends of the runners when depressed, and the metallic clips surrounding the ends of the sled-runners and forming retention-guides for the dogs, substantially as described.
2. The combination, with a sled having run-

ners whose rear ends are provided with oblique slots, of the rock bar or shaft secured to the rear end of the sled and provided with integral slotted arms, the brake-dogs pivotally mounted in said arms of the rock-shaft and working in the oblique slots in the ends of the sled-runners, the metallic clips surrounding the ends of the sled-runners and forming retention-guides for the dogs, the arm secured to one end of the rock-shaft at right angles thereto and having a slot in its end, the bell-crank lever fulcrumed to the sled and having a stud or pin

projecting from one arm thereof engaging with and moving in the slot in the arm on the one end of the rock-shaft, and a handle attached to the other arm of said lever, substantially as described.

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

ISAAC C. THOMPSON.

Witnesses:

N. E. GRIFFIN,

HARMON TEBBEN.