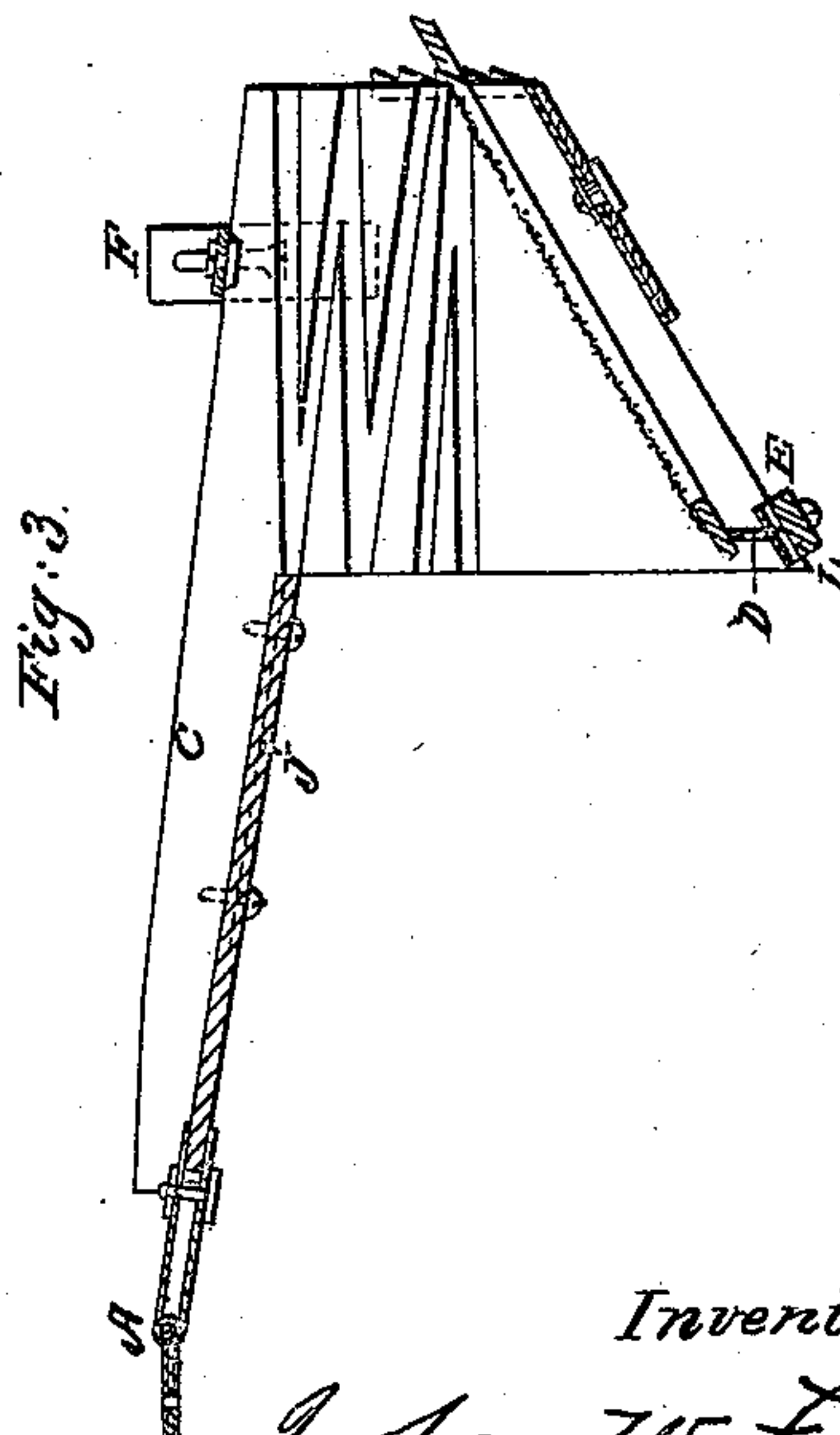
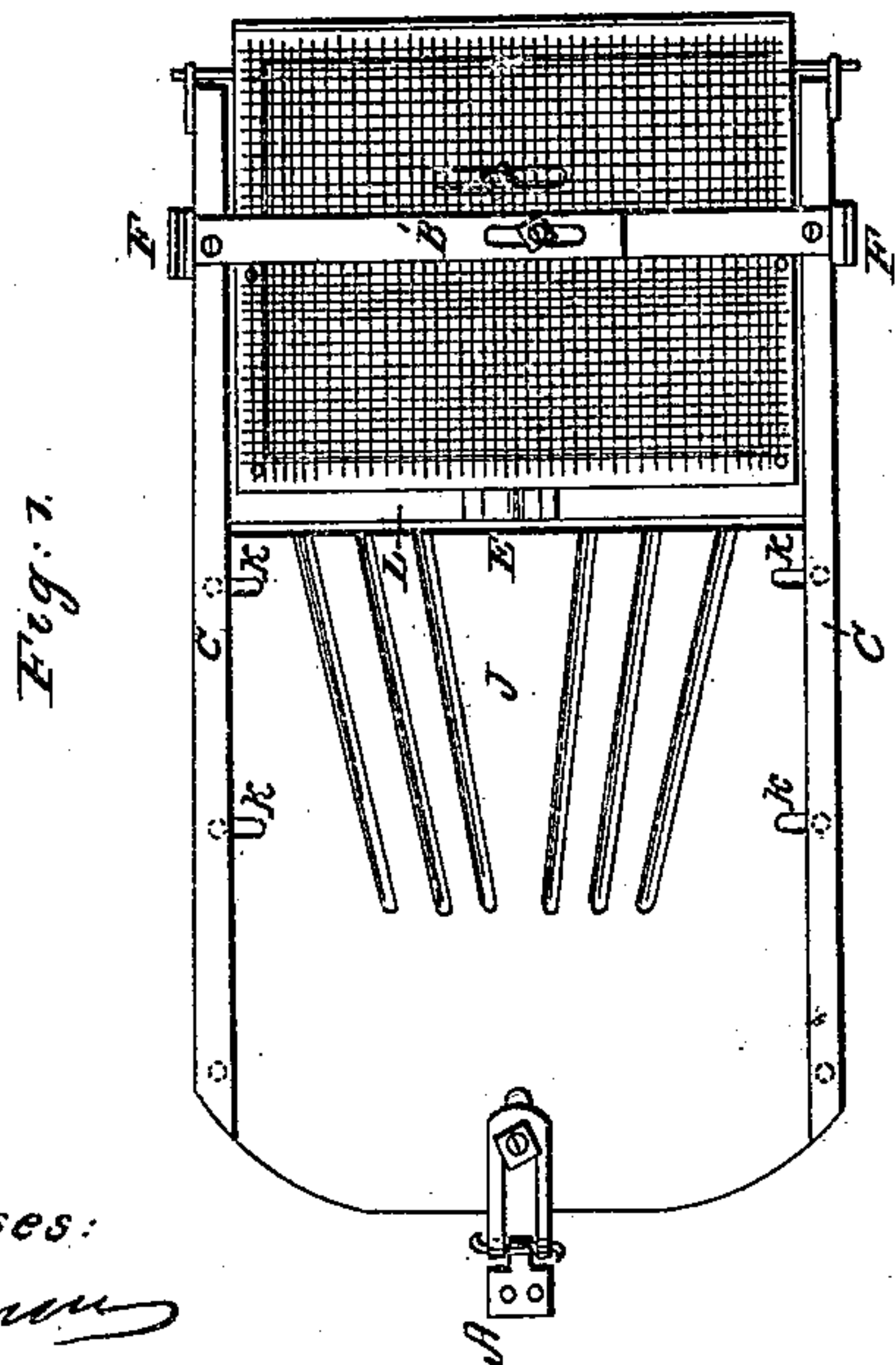
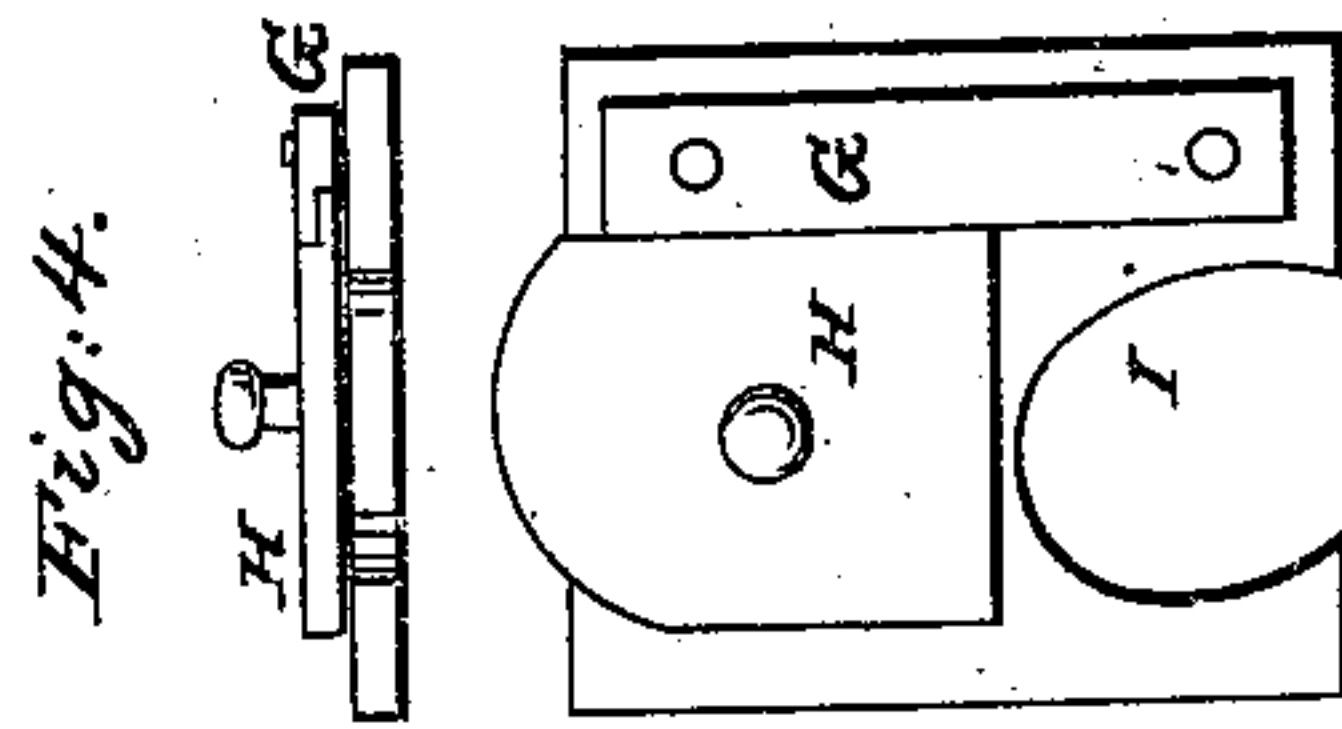
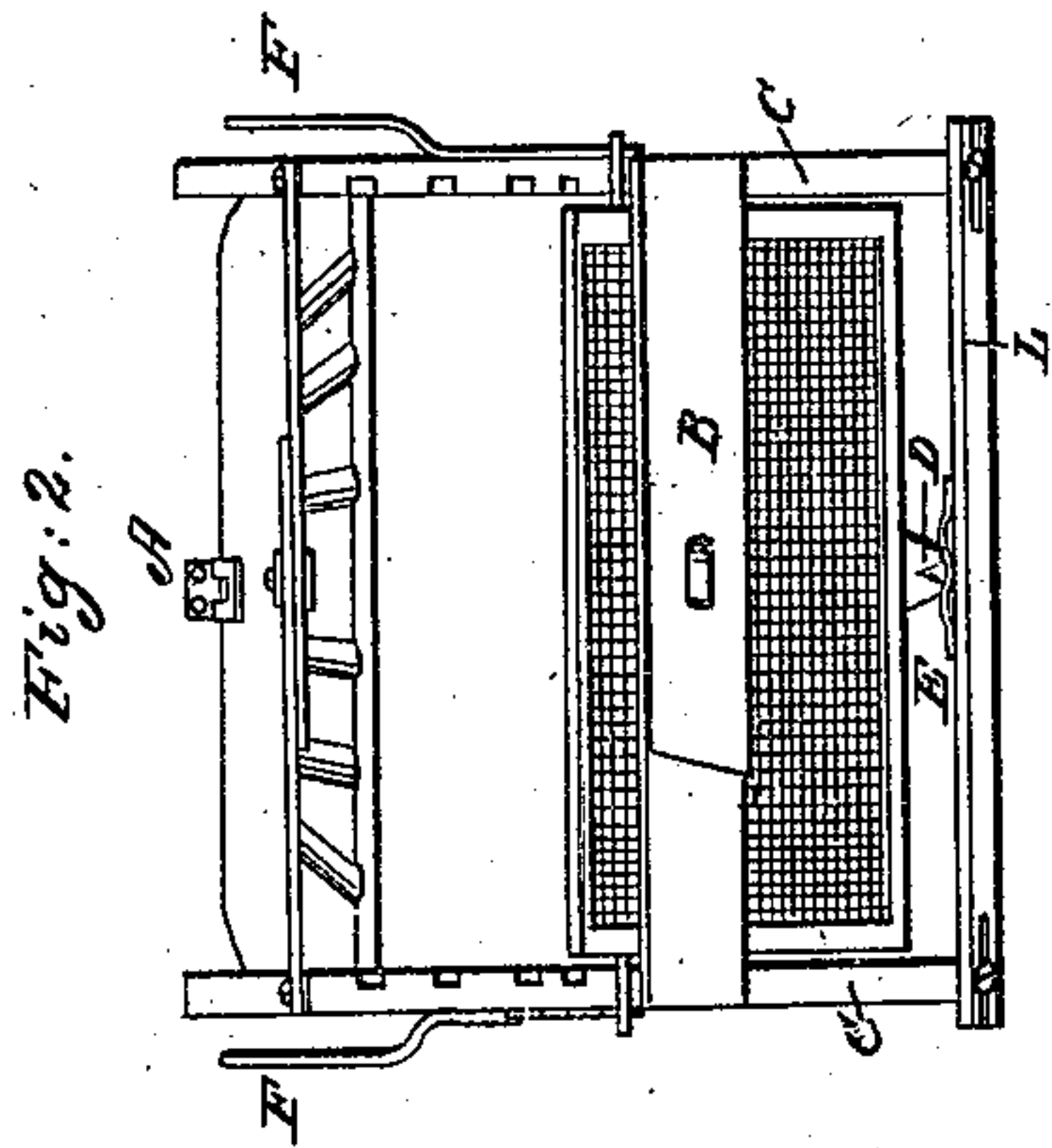


J. W. FREE.

Fanning Mill.

No. 52,840.

Patented Feb 27, 1866.



Witnesses:
R. M. ...
L. Murphy

Inventor:
John W. Free.
by
D. P. Holloway & Co.
attys.

UNITED STATES PATENT OFFICE.

JOHN W. FREE, OF RICHMOND, INDIANA.

IMPROVEMENT IN FANNING-MILLS.

Specification forming part of Letters Patent No. 52,840, dated February 27, 1866.

To all whom it may concern:

Be it known that I, JOHN W. FREE, of Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Fanning-Mills; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

The object of my invention is to provide for the adaptation to the ordinary fanning-mills for many years in common use an improved adjustable shoe so constructed as that it may be fitted to the various sizes of fanning-mills, and thus give to them the advantages of better motion and more screens than the old mills had, thus affording them cheaply the advantages of modern improvements.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a top view of the shoe. Fig. 2 is a longitudinal vertical section. Fig. 3 is an end view. Fig. 4 is a plan, showing the arrangement of the slides for the wind-hole in the case.

The same letters refer to identical parts.

The shoe is hung within the case of an ordinary fanning-mill by the adjustable slotted hinge A, which permits its free lateral and vertical play, thereby producing a rotary or circular motion, and by the slotted suspending-straps F F, which are hung to headed pins in the sides of the case, the slots being constructed as shown in the dotted lines in Fig. 3.

The sides C are grooved upon their inner surfaces, as shown, to receive the various screens required in the work of screening various kinds of grain. These sides are held together by the adjustable shoe-bottom B, strap B' by the bar L, on which is placed the notched plate E and the grain-board I. This bar and grain-board have on their outer extremities slots K, into which work screws. These slots permit the sides to be disposed according to the width of the mill, and for the same purpose slots are placed in the shoe-bottom B and strap B', through which bolts pass, and which,

in connection with the bar and grain-board, determine the width of the shoe as required.

The grain-board I has on its upper surface grooves or guides diverging toward the sides of the mill, for the purpose of counteracting the tendency of the grain to accumulate on the center of the grain-board, and insuring its more equal delivery upon the screens.

The lower screen rests upon the points E, which bear upon the plate D, which has notches upon its upper face, which give to the screen a vertical agitation as it is shaken from side to side by the action of the shoe.

The wind-hole I has above it the bar G, the lower side of which has a dovetailed groove cut in it, into which works a dovetail on the upper edge of the door H, which fits snugly against the side of the case, and slides when required over the wind-hole.

Having fully explained my invention, what I claim as my invention, and seek to secure by Letters Patent, is—

1. The adjustable slotted hinge A, when used for the purposes and in the manner set forth.

2. The adjustable sides C C, in combination with the slotted shoe-bottom B, bar L, and strap B', all constructed and arranged substantially as and for the purposes set forth.

3. The notched bearing D, in combination with the notched plate E, when used as and for the purposes set forth.

4. The combination of the slotted hinge A and the slotted suspending-straps F F with the adjustable shoe, substantially as and for the purposes set forth.

5. The adjustable grooved grain-board J, in combination with the sides C, substantially as and for the purposes set forth.

6. The combination of the dovetailed grooved bar G with the dovetailed fan-door H and wind-hole I, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses:

JOHN W. FREE.

CYRUS J. THOMPSON,
LEWIS D. STUBBS.