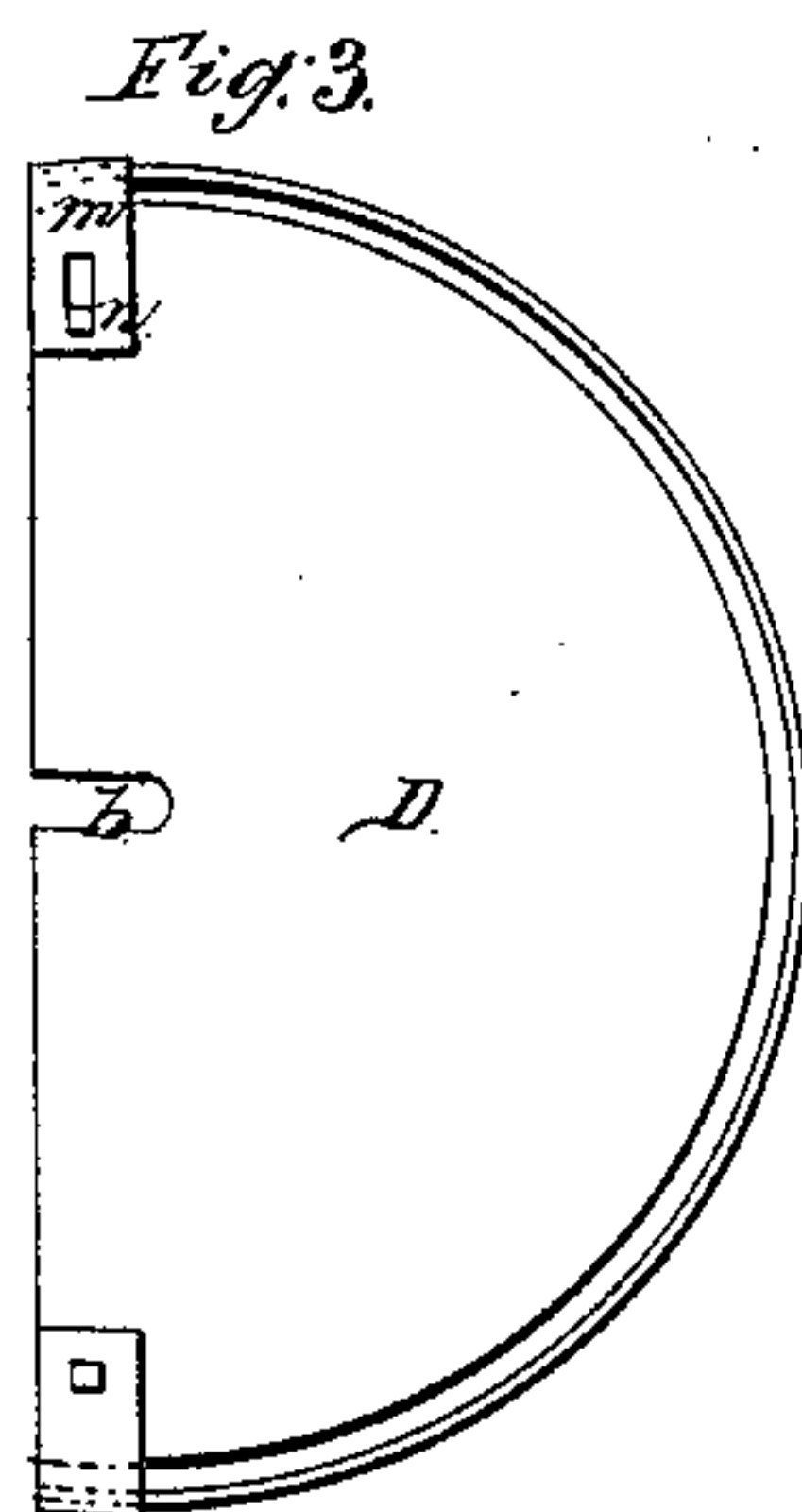
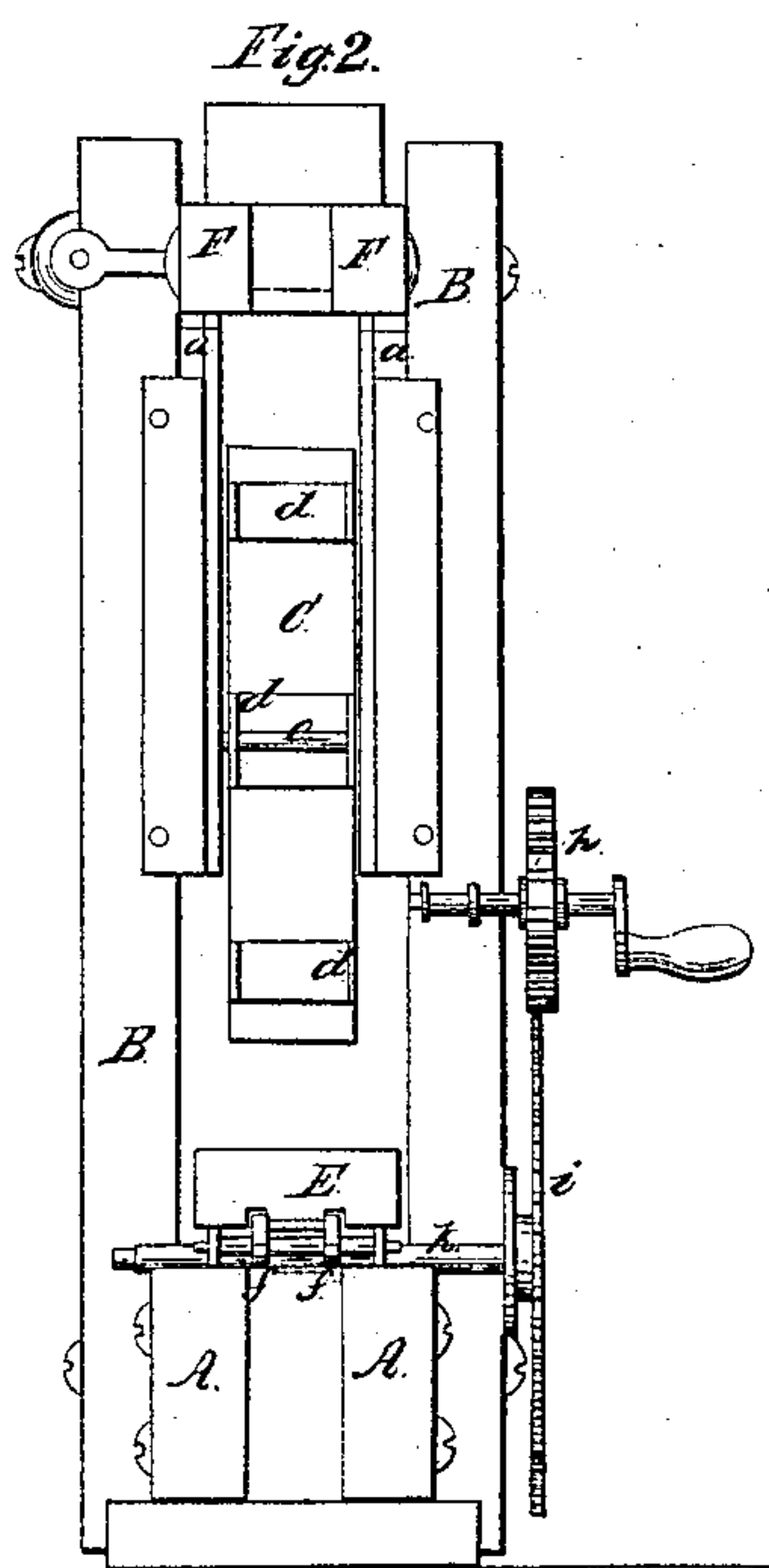
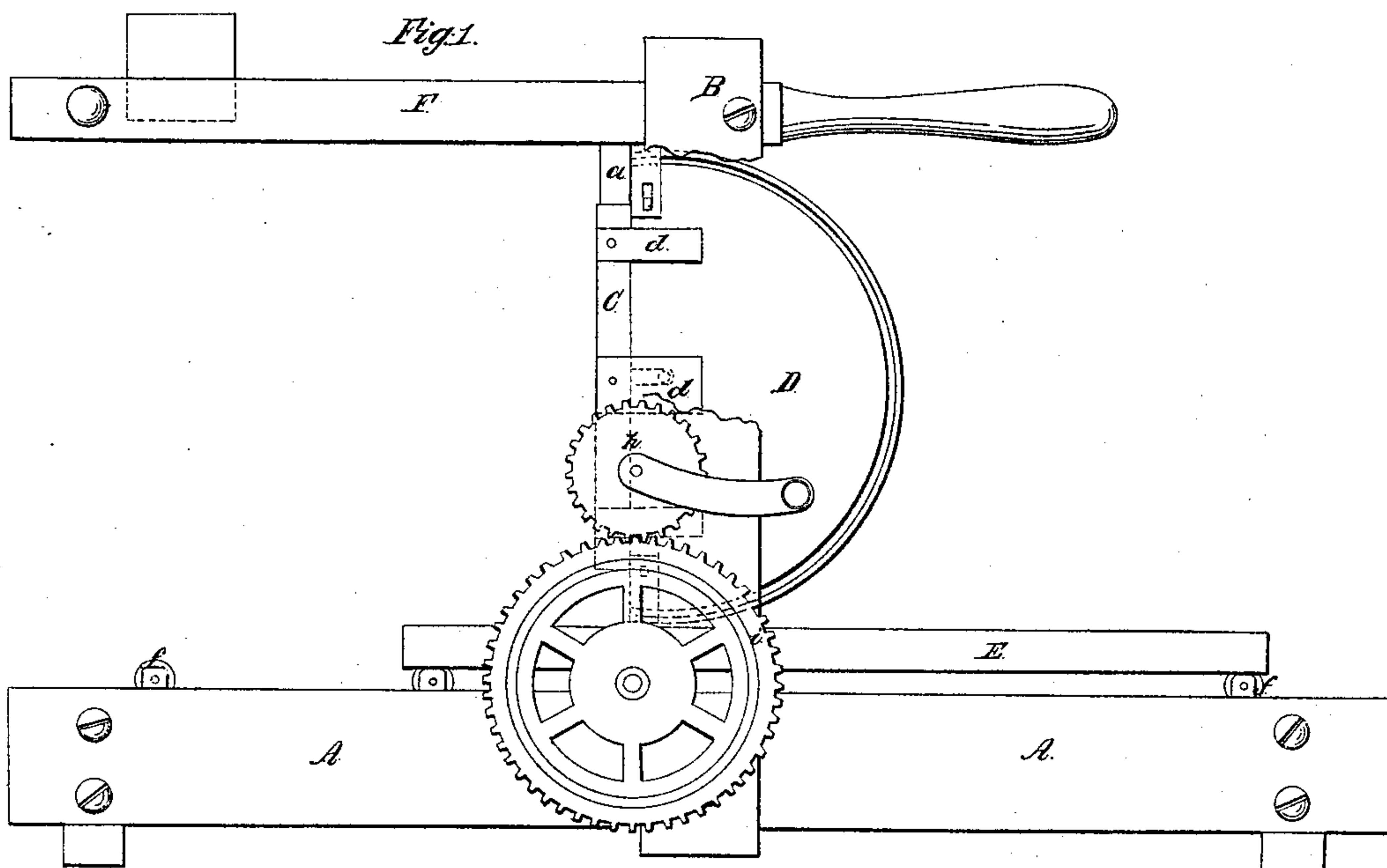


*Seidle & Eberly,*

*Bending Wood.*

*N<sup>o</sup> 29,107.*

*Patented July 10, 1860.*



*Witnesses:*

*L. Bradley  
E. P. Smith*

*H. Seidle Inventors:  
Jas. E. Seidle & Son  
H. Seidle Smith*

# UNITED STATES PATENT OFFICE.

F. SEIDLE AND SAM'L. EBERLY, OF MECHANICSBURG, PENNSYLVANIA.

## MACHINE FOR BENDING WOOD.

Specification of Letters Patent No. 29,107, dated July 10, 1860.

*To all whom it may concern:*

Be it known that we, FREDK. SEIDLE and SAMUEL EBERLY, of Mechanicsburg, Cumberland county, State of Pennsylvania, have  
5 invented certain new and useful Improvements in Machines for Bending Wood, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this  
10 specification, in which—

Figure 1 represents a side elevation of a machine for bending wood, embracing our improvements. Fig. 2 represents an end elevation of the same, with the form or pattern removed in order to show the manner  
15 of its construction with the machine. Fig. 3 represents a side elevation of the pattern.

Our improvements in wood bending machines relate more particularly to that class,  
20 in which a revolving pattern is used, in connection with a movable carriage.

In this class of machines as neither the bed or the pattern yield, they are not adapted neither can they be used to bend  
25 wood into irregular shapes or curves, as all parts of the surface of the pattern, must be at the same distance from its center of revolution.

To overcome this defect is the object of  
30 one part of our invention, which consists in the employment of a revolving yielding pressure pattern, in connection with an unyielding bed; whereby all parts of the surface of an irregular curved pattern, as it is  
35 revolved, are caused to press with equal force on the bed and strip and bend the strip to conform to the irregularities of the surface of the pattern.

The object of another part of our invention is to so arrange the connection between  
40 the pattern and the machine that it can be taken out and replaced with greater ease and facility than heretofore; and it consists in connecting the pattern with a sliding frame  
45 furnished with side clips which embrace the side of the pattern, while an open slot is made in the center of the pattern, through which the central pivot passes and supports the pattern at that point, by which means  
50 the pattern may be removed from the slides by simply drawing it out, without unloosing any connecting bolts.

Our improved wood bending machine represented in the accompanying drawing,  
55 consists of a bed (A) to the sides of which

are bolted, uprights (B) carrying a pattern frame (C). This frame is pivoted to side pieces (a) (so that it can revolve) which slide in guides between the two posts; and the pattern (D) is connected to the turning  
60 and sliding frame (C) by a slot (b) in its back into which, the pivot (c) enters, and is also supported by the back of the frame, and by clips (d) extending out from its side.

Resting upon rollers (f) on the bed, is a  
65 carriage (E) which moves between the uprights and under the pattern, and on the under side of the carriage, is a rack into which a toothed pinion (g) that gives motion to the carriage meshes. 70

A lever (F) pivoted to the top of the upright frame, acts on the pattern frame, causing the pattern to press the strip while being bent close between itself and the sliding bed,  
75 and causing the strip to conform to the irregularities in the pattern while being wrapped around it.

Motion is communicated to the carriage through a toothed pinion (h) (to which the power is applied) which gears into a  
80 toothed wheel (i) on the end of the rack pinion shaft (k). The strip (l) to be bent is attached to the pattern (D) by means of a clamp (m) and key (n) or by any other  
85 well known means, and the pattern and frame are turned, so that the end of the strip comes in contact with the bed and is held pressed firmly against it by the pressure lever. Motion being communicated to  
90 the bed the pattern is caused to turn and draw the strip between itself and the bed; by which means the strip is wound around the pattern and caused by its yielding, to conform to the irregularities of its surface. After the strip is wound around the pattern,  
95 its opposite end is attached to the pattern to retain it in place. The pattern is then removed by drawing it from the frame, and another substituted; or another strip is attached to the same pattern and the operation of bending it repeated as before. 100

It will be seen that in arranging a revolving pattern, in a yielding frame, to which pressure is applied, the surface of an  
105 irregular pattern as it is turned is caused to press at all points on the strip by which means the strip is bent so as to conform to the irregular curves of the pattern.

We do not confine ourselves to the construction or arrangement of the parts as de- 110



scribed, as the pattern instead of being connected to a turning frame may be pivoted to the yielding slides of that frame; and instead of a pressure lever being used  
5 springs acting on the slides may be substituted therefor, and the bed instead of sliding may be made to revolve.

Having thus described our improvements in wood bending machines, what we claim as  
10 new and desire to secure by Letters Patent is—

1. The combination of a revolving yielding pressure pattern, with an unyielding

sliding bed, arranged substantially as described for the purpose as set forth.

15

2. Attaching the pattern to the frame substantially as described, so that it can be removed by simply drawing it out, without unloading any bolts.

In testimony whereof we have subscribed  
our names. 20

FREDERICK SEIDLE.  
SAMUEL EBERLY.

Witnesses:

B. C. PAINTER,  
JOSEPH LEAS.