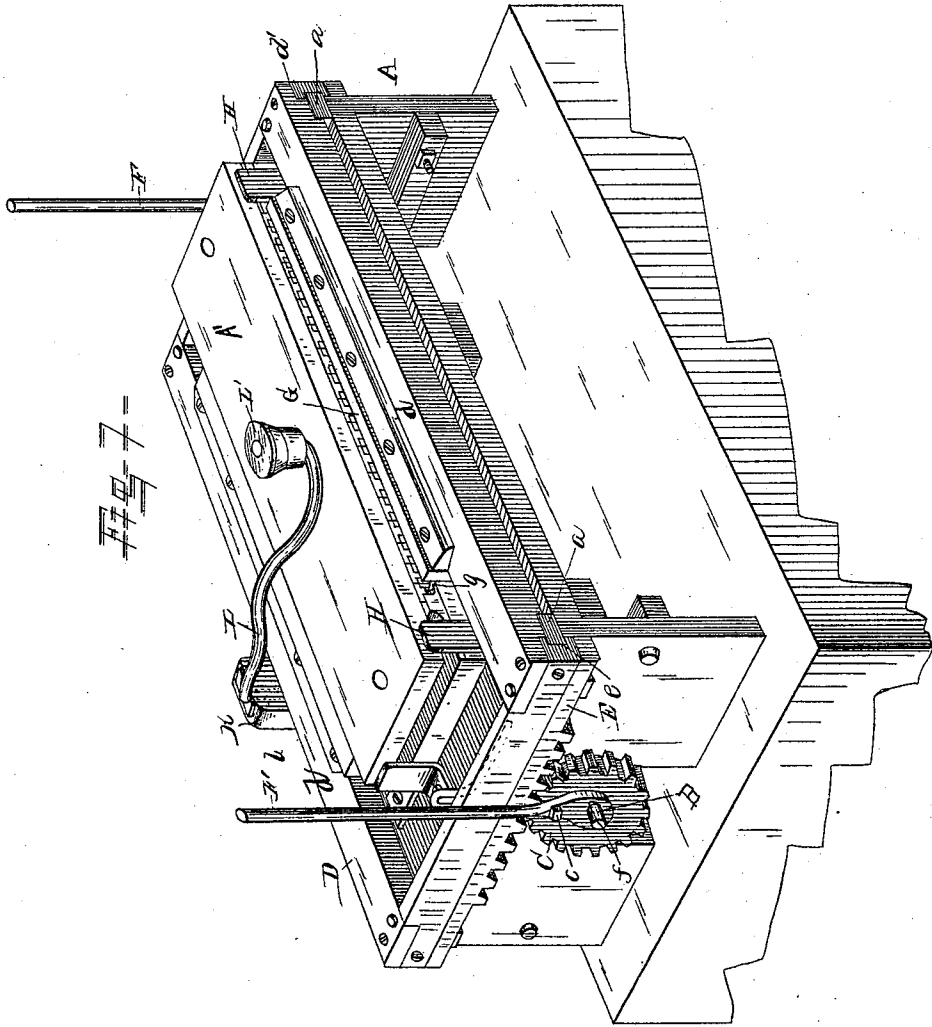


C. NEFF.

CIGAR PERFORATING MACHINE.

No. 355,334.

Patented Jan. 4, 1887.



Witnesses

*Howard J. Schmidt,*  
*Jos. M. Henderson,*

Inventor

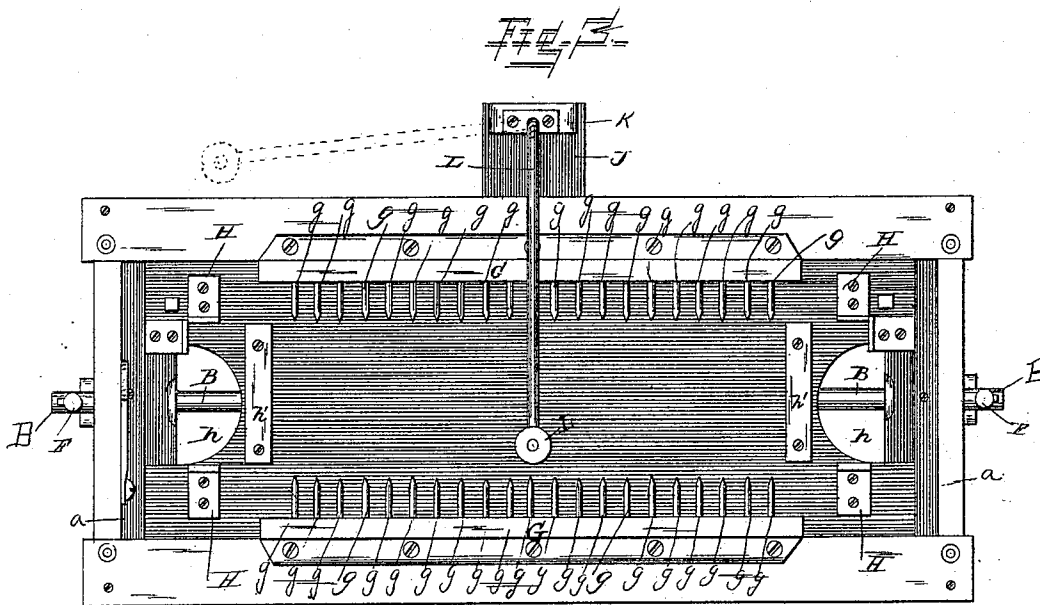
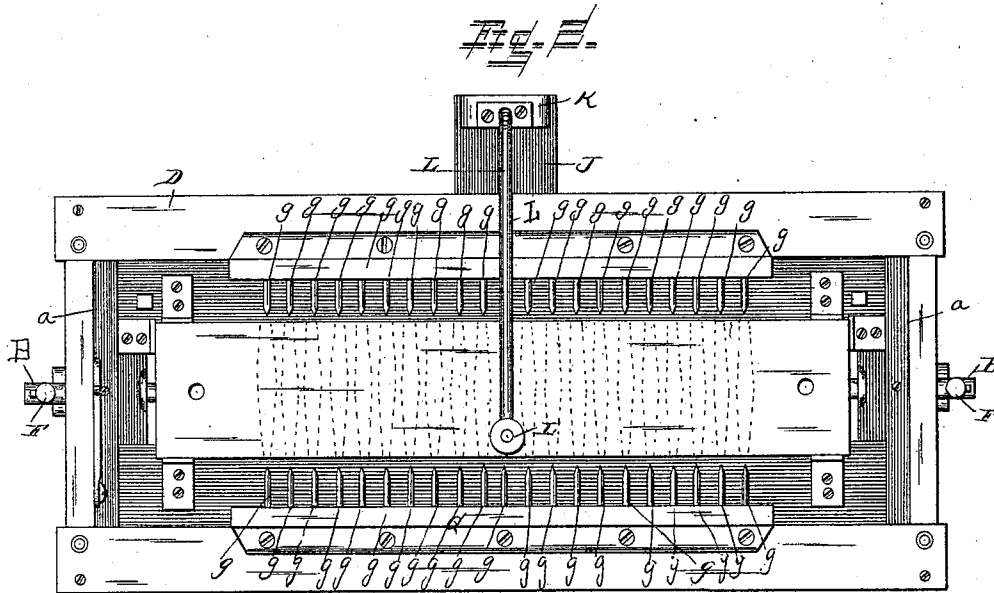
*Charles Neff*  
 By *his* Attorney  
*Franklin D. Hough*

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# UNITED STATES PATENT OFFICE.

CHARLES NEFF, OF DALLASTOWN, PENNSYLVANIA.

## CIGAR-PERFORATING MACHINE.

SPECIFICATION forming part of Letters Patent No. 355,334, dated January 4, 1887.

Application filed July 3, 1886. Serial No. 207,102. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES NEFF, a citizen of the United States, residing at Dalls-  
town, in the county of York and State of Penn-  
sylvania, have invented certain new and useful  
Improvements in Cigar-Perforating Machines;  
and I do hereby declare the following to be a  
full, clear, and exact description of the inven-  
tion, 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 letters of reference marked  
thereon, which form a part of this specifica-  
tion.

This invention relates to machines for per-  
forating cigars, and has for its object to sim-  
plify and cheapen the construction, lessen the  
cost, increase the durability, and render more  
efficient in operation this class of devices; and  
to such ends the invention consists in the pe-  
culiar combinations and the novel construc-  
tion, arrangement, and adaptation of parts,  
all as more fully hereinafter described, shown  
in the drawings, and particularly pointed out  
in the claims.

In the said drawings, Figure 1 represents a  
perspective view of a cigar-perforator con-  
structed in accordance with my invention.  
Fig. 2 is a top plan of the same. Fig. 3 is a  
similar view with the mold-board removed.

In devices of this kind as heretofore con-  
structed the construction has been such that  
it has been necessary to use needles of such a  
length that the machine soon failed to work  
satisfactorily, owing to the bending of the  
needles, so that they were turned from a straight  
central line through the side of the cigar. By  
my construction I am enabled to use needles  
of a minimum length and avoid this objection.

In the drawings, A represents a suitable  
stand or frame adapted to be secured to a  
cigar-maker's bench or othersuitable support.  
Journaled in suitable bearings in this stand  
is a horizontal shaft, B, carrying upon its outer  
end the cog-wheel C. In the drawings I have  
shown a cog-wheel upon one end of this shaft,  
which will generally be found to be sufficient,  
although two may be used, if desired. D is  
a sliding frame, adapted to move transversely  
over said stand by the mechanism and for the  
purpose hereinafter described.

Across the ends of the stand A, I secure the  
cleats or guide-strips *a*. The longitudinal  
rails *d* of the sliding frame D are halved out,  
so as to form shoulders *d'*, serving as guides  
for the frame in its traverse. The end rails  
of this sliding frame are halved to the longi-  
tudinal rails, and upon their inner sides are  
formed with grooves *e*, to receive the overlap-  
ping edges of the guide-strips *a*, as clearly  
shown in Fig. 1. On the under side of these  
end rails of the longitudinal frame are the  
racks or rack E, meshing with the said cog-  
wheels, two racks being used, of course, when  
the two cog-wheels are employed.

F is a lever, formed with an opening, *f*, to  
receive the end of the shaft B, and is secured  
to the cog-wheel C by a screw-bolt, *c*, passing  
through the lever into the side of the said  
wheel. This manner of securing the lever  
greatly strengthens the same and avoids all  
tendency to become loosened in use.

Secured to the inner top edge of the longi-  
tudinal rails of the sliding frame, in any suit-  
able manner, so as to be readily removed or  
replaced, are the strips G, secured to each of  
which is a plurality of short stout pins or nee-  
dles, *g*, the number of pins corresponding to  
the number of cigars in the mold. These  
strips or plates G are made removable and in-  
terchangeable, so that in the manufacture of  
different sizes and shapes of cigars a plate may  
be used having pins corresponding in number  
and location to the cigars in the mold. This  
will be found greatly advantageous, as it al-  
lows of the use of one machine for various  
shapes and sizes of cigars.

The top of the stand A, near the center of  
each end, is cut away, as shown at *h*, to admit  
the hand of the operator beneath the end of  
the mold-board, and thus to facilitate the in-  
sertion and removal of the same, and to the  
top of the stand, near these cut-away portions,  
are secured the thin strips *h'*, which serve to  
slightly raise the mold-board from the top of  
the table, thus rendering it possible to use  
thicker and more substantial pin-retaining  
strips G than would otherwise be possible, and  
also assisting in the adjustment and removal  
of the mold-board. These strips may be omit-  
ted, if desired.

Secured to the top of the stand A, and near

each end, are the angle-irons H H, which serve to hold the mold-board in position when once placed therein.

I have found from experience that in order to obtain the best results in piercing the cigars the mold-board must be held immovably in position, so as to insure the insertion of the needles directly in the center of the cigars, and for this purpose I have provided the following means: Secured transversely to the top of the stand, near its center, is the cleat J, which serves to strengthen said top, to enable it to better sustain the weight of the mold-board. Rising from the back end of this cleat is the upright K. Passed vertically through this upright is the downwardly-bent end *l* of the spring-arm L, which is secured to said upright by means of a washer and nut, so as to allow said arm to be swung around when necessary. The free end of this arm is provided with a suitable knob or handle, L', by which it may be turned, and when the mold-board is in position, as shown in Fig. 2, and the spring-arm is turned so as to bear on the top of the mold-board, as shown in the same figure, the mold-board is immovably held in position.

In operation the mold-board A', containing the cigars to be pierced, is placed upon the platform of the machine, as shown in Fig. 1, the angle-irons H serving to guide and hold the same in place. The spring-arm L is then turned inwardly, so as to cause it to bear downward upon the upper surface of the mold-board. The levers F F' are then grasped by the operator, and by a sudden forward, followed by a backward, movement of said levers a reciprocating movement is communicated to the frame D, and the pins carried by

the frame are caused to alternately enter the opposite ends of the cigars within the mold.

Having thus described my invention and set forth its merits, what I claim to be new, and desire to secure by Letters Patent, is—

1. The combination, with the stand A, provided with the angle-irons H to engage the mold-board, of the mold-board, the reciprocating frame-carrying needles, and the swinging spring-arm L, arranged to press with its free end upon the top of said mold-board, and mechanism for reciprocating the frame, substantially as and for the purpose specified.

2. The combination, with the stand A, the mold-board, and the reciprocating frame working in guides on said stand and carrying piercing-needles, of the cleat J, secured to the top of said stand, the upright K on said cleat, and the spring-arm L, having downwardly-bent end *l*, pivotally secured in said upright and its free end arranged to press upon the top of said mold-board, and mechanism for reciprocating the frame, substantially as and for the purpose specified.

3. The combination, with a stand, A, provided with angle-irons H, to engage with the mold-board, a removable mold-board, and the reciprocating frame, of plates carrying piercing-needles and detachably secured to the longitudinal rails of said frame and means for reciprocating said frame, substantially as and for the purpose specified.

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

CHARLES NEFF.

Witnesses:

A. P. NEFF,  
D. S. HILDEBRAND.