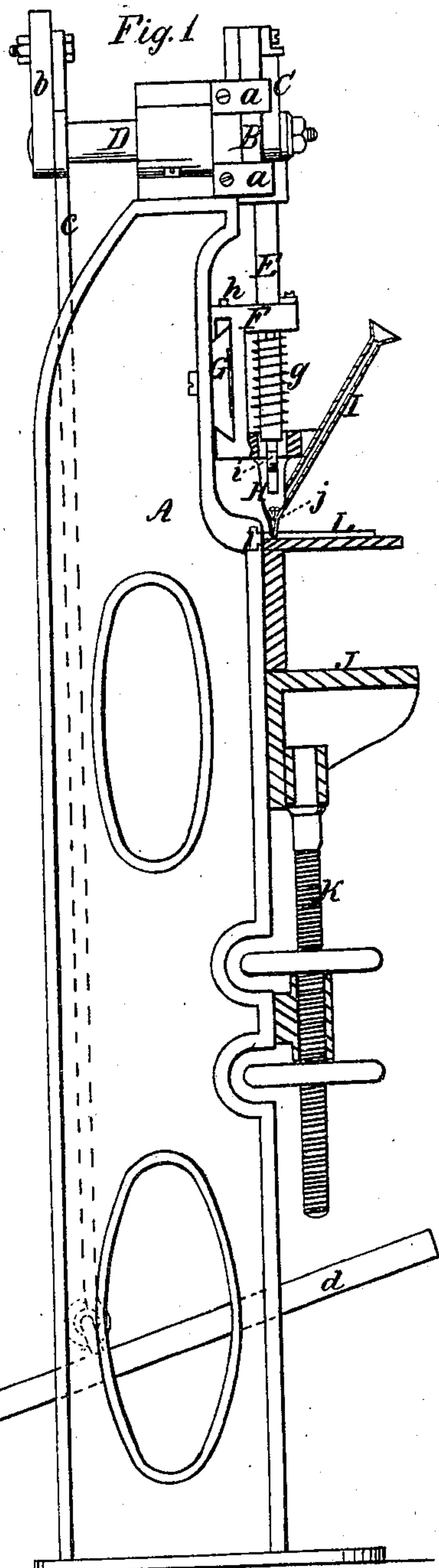
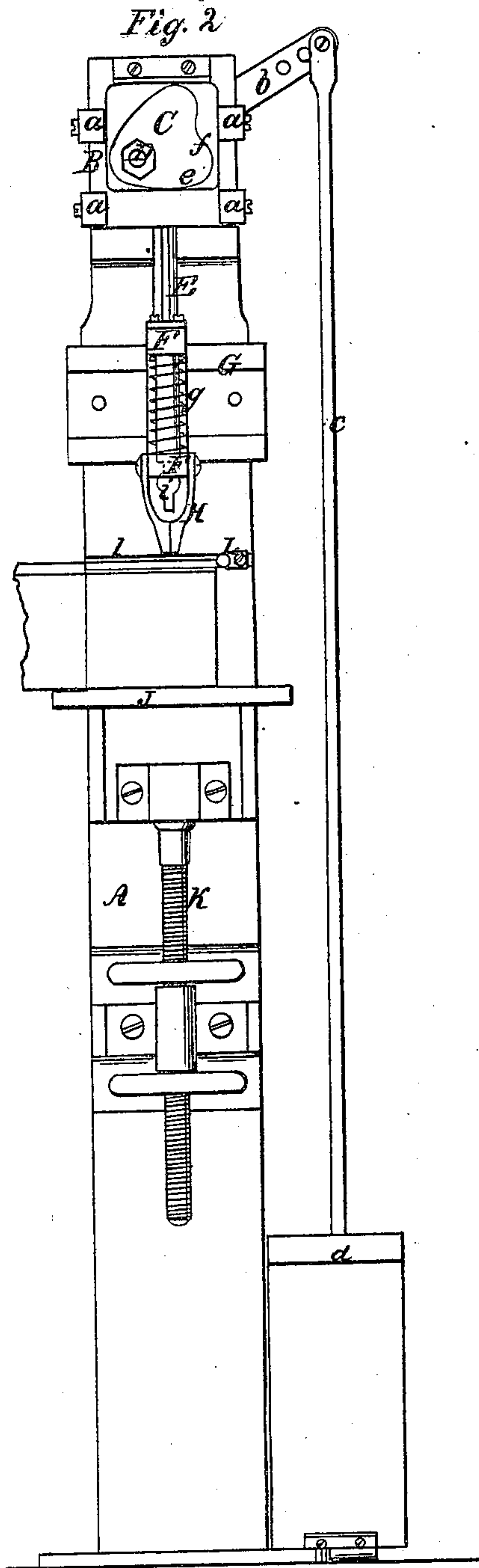


G. Wicke,
Machine for Nailing Boxes,
No 38,924,
Patented June 16, 1863.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE WICKE, OF NEW YORK, N. Y.

MACHINE FOR NAILING BOXES.

Specification forming part of Letters Patent No. 38,924, dated June 16, 1863.

To all whom it may concern:

Be it known that I, GEORGE WICKE, of the city, county, and State of New York, have invented a new and Improved Machine for Nailing Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a sectional side elevation of my invention. Fig. 2 is a front elevation of the same.

Similar letters of reference in both views indicate corresponding parts.

The object of this invention is to drive the nails which hold together the several boards constituting a box for cigars or for other articles. The nails are generally driven by a hammer, each nail for itself, which, obviously, is a very tedious operation.

This invention consists in the employment of grooved spring-jaws for the purpose of holding the nails and to guide them to the proper place; and it consists, further, in combining with said spring-jaws a corresponding number of rising and falling plungers for the purpose of driving each nail singly, and all at the same time; and, also, in arranging said plungers with globe or disk shaped collars in such a manner that they spread the grooved spring-jaws at the proper moment, and allow the heads of the nails to pass; also, in arranging the cam that serves to depress the plungers with a circular portion in such a manner that the plunger cannot be depressed any farther than necessary to drive the nails; finally, in the general arrangement and combination of all the parts, so that the plungers and jaws, as well as the table which supports the boards, can be adjusted according to the different sizes of boxes to be made.

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

A represents a frame of cast-iron or of any other suitable material. Secured to the upper part of this frame by means of angular guide-pieces *a* is the rising-and-falling gate B, which is operated by means of a cam, C, on the end of a shaft, D, which connects by an arm, *b*, and rod *c* with a treadle, *d*. The cam C, on being turned in the direction of the ar-

row marked on it in Fig. 2, depresses the gate B until the circular portion *e f* bears upon the gate. This portion of the cam is made to form part of a circle described from the center of shaft D, so that the cam may be turned more or less without depressing the gate B any farther than desirable. The gate B acts on one or more plungers, E, each of which moves up and down in a carriage, F, and a spring, *g*, has the tendency to raise the plunger after the same has been depressed or to keep it up when not exposed to the action of any power. The carriage F slides in a lateral direction on ways G, and it is adjusted at the proper point, where the nail is to be driven, by set-screws *h*. A series of plungers to correspond to the number of nails to be driven simultaneously may be so arranged that by depressing the treadle all the plungers are depressed, and consequently all the nails inserted at the same time. The lower end of the plunger E is turned down, as clearly shown in the drawings, leaving them just large enough to cover the heads of the nails to be driven, and a disk-shaped collar, *i*, is formed at a short distance above these lower ends. When depressed, the plunger enters the spring-jaws H, which are secured to the sides of the carriage F. These jaws are provided with grooves *j* to receive the nails, (see Fig. 1,) and they are so formed that when the plunger descends the disk-shaped collar *i* spreads the same, allowing the head of the nail to pass freely through the grooves *j*. The nails are fed through an inclined tubular channel, I, one after the other, and if several plungers are used the whole series are depressed by one motion of the cam C. A table, J, on the lower portion of the frame A serves to support the boards to be nailed, and this table is adjustable by means of a screw-spindle, K. Said boards are adjusted in the correct position by a slide, L, which is adjustable in a groove, *l*. A small recess in the frame A allows the horizontal boards to project very little beyond the edge of the vertical board, so that the rough edges of the boards can be removed by the aid of a plane after the nailing has been accomplished. The table J, the slide L, and the plunger or plungers can thus be adjusted to suit boxes of different size, and the nails are driven simultaneously by one motion of the foot.

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

1. The employment of the grooved spring-jaws H, substantially as described, for the purpose of receiving the nails and to guide them to their proper places.

2. The combination, with the spring-jaws H, of the rising-and-falling plunger E, constructed and operating substantially as and for the purpose described.

3. Arranging the plunger E with a disk-shaped collar, *i*, or its equivalent, to operate in combination with the spring-jaws H, substantially as and for the purpose specified.

4. The arrangement of the circular portion *ef* on the cam C, to operate in combination with the gate B and treadle *d*, substantially as and for the purpose set forth.

5. The arrangement and combination of one or more adjustable carriages F, table J, and slide L, constructed and operating in the manner and for the purpose substantially as specified.

GEORGE WICKE.

Witnesses:

GEO. W. REED,
M. S. PARTRIDGE.