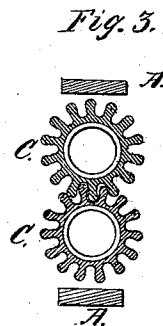
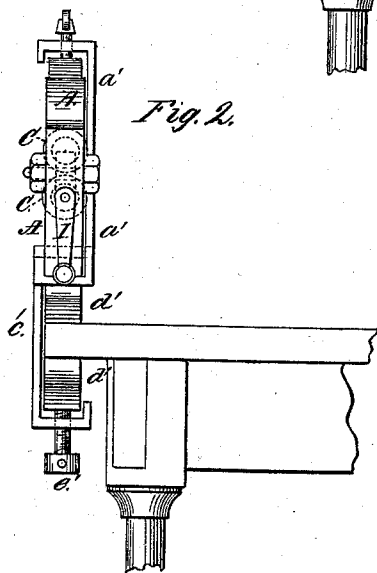
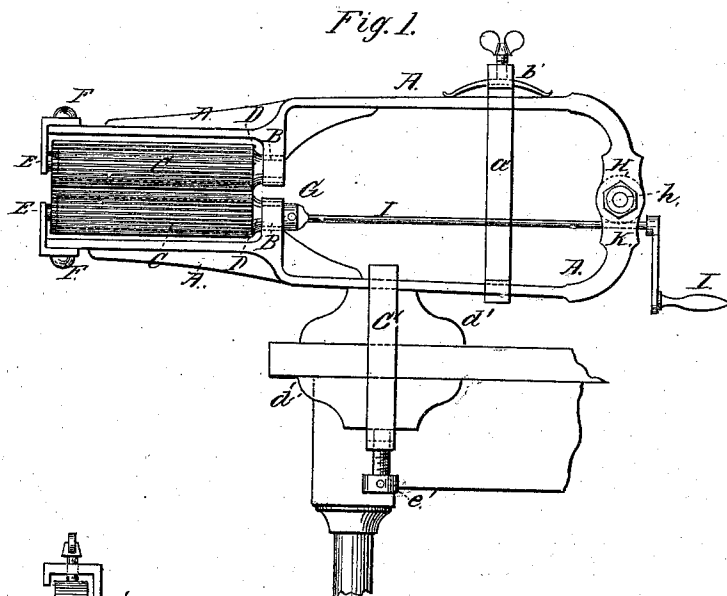


E. P. HOLLY.
Fluting-Machines.

No. 138,650.

Patented May 6, 1873.



Witnesses.
Edward M. Ketchum.
J B Bayce

Inventor
Edgar P. Holly.

UNITED STATES PATENT OFFICE.

EDGAR P. HOLLY, OF LOCKPORT, NEW YORK.

IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. **138,650**, dated May 6, 1873; application filed December 12, 1872.

To all whom it may concern:

Be it known that I, EDGAR P. HOLLY, of the city of Lockport, in the county of Niagara and State of New York, have invented certain Improvements in Fluting-Machines, of which the following is a specification:

My invention relates, first, to the combination of the upper arm of the frame and the lower arm and a bolt forming a hinge-joint, so that the rollers can be separated to admit material; second, to the combination in a fluting-machine of the cogged or fluting rollers and the arms of the machine and a movable clamp, so that the said rollers shall be capable of working over a surface much wider than their own length; third, to the combination of the lower arm of the frame and the clamp and blocks, by means of which the machine may be immovably secured in its position.

Figure 1 is a side elevation embodying my invention. Fig. 2 is an elevation, showing that end of the machine which is at the right hand in Fig. 1. Fig. 3 is a vertical transverse section, showing the frame, rollers, and their cavities.

In Fig. 1, A A is the frame of the machine. It consists of two arms, made strong enough to resist the tendency to spring when subjected to necessary pressure. To one end of each arm at B B and E E are attached hollow cogged rollers, such as are now in use for similar purposes, the cavities and openings of which are shown by the dotted lines at B B. The parts of the frame B B project from either arm inwardly, and are bored to receive journals turned upon the rollers C C at D D. E E are pieces attached to the arms A A by the screws F F. These pieces project from the ends of the arms to the center of the rollers C C and then at right angles into the rollers. A hole is drilled through them which connects with the center of the cavity or hollow space in the rollers. This is to admit a probe by which the heating-iron is pushed out of the rollers. A small piece of rubber is inserted between the pieces E E and the arms, which assists in adjusting the rollers and in equalizing the pressure. The diameter

of the openings is less than the diameter of the hollow spaces in the rollers. This prevents the hot iron or ashes from working out. The arms A A are made separately and longer than the rollers C C. They are drilled at H and there fastened by a bolt, *h*, in such a way as to form a hinge-joint, so that the upper arm may be lifted by loosening the clamp and the rollers separated to admit the cloth. The rollers are revolved by means of the shaft and crank I I, which is of iron and of suitable strength. This shaft passes through the lower arm A at K, and is provided at one end with a crank. At the other end the shaft is enlarged to fit and close the opening to the hollow space of the lower roller. The journal of the lower roller passes through and beyond the projection B, and has a slot which receives the key placed on the enlargement of the shaft, as shown at *g*. The connection is thus formed by which the rollers are turned. The clamp *a'* is movable, embraces both arms, and is provided with a thumb-screw, under which and resting on the top of the upper arm A is a spring, *b'*. This clamp and spring hold the arms in place and equalize the pressure. They can be shifted or removed, and thus brought near to the rollers or crank, as desired. By this means, when it is desired to work over a surface wider than the length of the rollers, the clamp and spring are moved to the enlargement of the arms, and the surface first worked over occupies the space between the inner ends of the rollers and the clamp, the arms A A being of any desired length.

The machine is fastened to the table by means of the clamp *c'* and the blocks *d' d'*. One of the blocks is laid on the table, and the machine is then placed upon it. The clamp is then brought over the arm at its point of contact with the wood. The other piece *d'* is then placed underneath within the clamp; then by means of the screw *e'*, at the lower end of the clamp, the machine can be fastened immovably to the table.

I claim as my invention—

1. The combination, in a fluting-machine, of the arms A A and the bolt H forming a hinge-

joint, substantially as and for the purpose herein set forth.

2. The combination of the rollers C C, the arms A A, and the movable clamp *a'* and the spring *b'*, substantially as and for the purpose hereinbefore set forth.

3. The combination of the lower arm of the

frame and the clamp *c'* and the blocks *d'* *d'*, substantially as and for the purpose hereinbefore set forth.

EDGAR P. HOLLY.

Attest:

CHAS. M. YOUNG,
S. H. FINN.