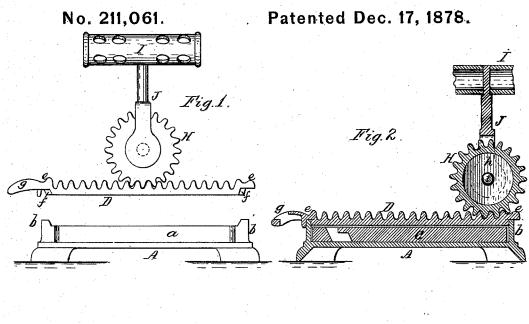
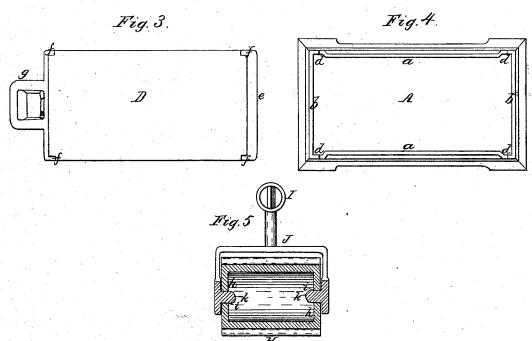
## C. G. SHEPARD & P. ADAMS, Jr. Fluting-Machine.





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## UNITED STATES PATENT OFFICE.

CHARLES G. SHEPARD AND PETER ADAMS, JR., OF BUFFALO, NEW YORK, ASSIGNORS TO SAID SHEPARD AND WALTER J. SHEPARD, OF SAME PLACE.

## IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. 211,061, dated December 17, 1878; application filed October 4, 1878.

To all whom it may concern:

Be it known that we, CHARLES G. SHEP-ARD and PETER ADAMS, Jr., both of the city of Buffalo, in the county of Erie, in the State of New York, have invented new and useful Improvements in Fluting-Machines, of which the following is a specification, reference being had to the accompanying drawing.

Our invention relates to that class of hand fluting-machines in which a flat fluted bedplate is employed in connection with a fluted roller, which is provided with a suitable handle

for manipulating it.

Our invention consists in constructing the fluting-plate with stops to prevent the roller from running over the ends of the plate; also in the peculiar construction of the fluter-plate and base, whereby both are retained in their

proper relative position.

In the accompanying drawing, Figure 1 is a side elevation of a fluting-machine provided with our improvements, the fluter-plate being raised from the base. Fig. 2 is a sectional elevation of our improved fluting-machine. Fig. 3 is a bottom-plan view of the fluter-plate. Fig. 4 is a top-plan view of the base. Fig. 5 is a longitudinal section of the roller.

Like letters of reference indicate like parts

in each of the figures.

A represents the rectangular base of the fluting-machine, provided on its upper side with side pieces, a, and end pieces, b, forming a socket or receptacle for the heater C.

Disthe corrugated fluter-plate, resting upon

the base A.

The end pieces, b, of the base are made higher than the side pieces, a, as shown in Figs. 1 and 2; and they are also made longer than the distance between the side pieces, so as to form a pocket or recess, d, at each corner, as shown in Fig. 4.

The fluter-plate D is provided at its ends with raised lips e, resting upon the end pieces, b, of the base, while the body of the fluter-plate rests upon the depressed side pieces, a.

f is a jog or offset, formed on the under side of the fluter-plate at each end of the lips e, to

fit into the recesses d.

This construction of the fluter-plate and base prevents the displacement of the plate in either direction when in use, and at the same time permits both parts to be readily cast.

The raised lips e at the ends of the fluting-

plate D cause the fluting-roller to rise before it reaches the end of the plate, thereby enabling the operator to feel when the end of the plate is nearly reached, and preventing the operator from pushing the roller over the end of the plate, which frequently occurs in ordinary fluting-machines, and often results in an injury to the article to be fluted, especially when consisting of a fabric of fine texture, such as lace.

g represents the slotted extension, formed with the fluting-plate, for receiving the end of lifter. This extension is made convex, so that when the fluter plate is resting upon a flat surface—for instance, upon the top of a kitchenstove—the end of the lifter can be readily inserted under the curved extension. The upwardly-curved form of the extension g also serves as an additional guard to prevent the roller from running over the end of the fluter-plate on which the extension g is formed.

H is the fluting-roller, made hollow, and provided with end plates, h, having central openings, i, for the reception of the journals. I is the handle; J, the bifurcated handle-shank, and k the journals formed on the inner side of the ends of the bifurcated shank. The latter is constructed of suitable metal and sprung over the roller, so as to engage its journals into the openings i of the roller. The openings i also permit the removal of the core from the roller after casting, and are afterward covered by the bifurcated handle-shank, so that the roller has a smooth and pleasing appearance.

We do not broadly claim a fluter-plate formed with ribs or flanges, and the base constructed with corresponding recesses, for holding the

parts together; but

We claim as our invention—

1. A fluter-plate constructed with one or more end stops, e, to prevent the roller from being pushed over the ends of the plate, substantially as set forth.

2. The combination, with the base A, provided with side pieces, a, raised end pieces, b, and corner pockets, d, of the fluter-plate D, provided with raised lips e and offsets f, substantially as and for the purpose set forth.

CHARLES G. SHEPARD. PETER ADAMS, JR.

Witnesses:

JNO. J. BONNER, EDWARD J. BRADY.