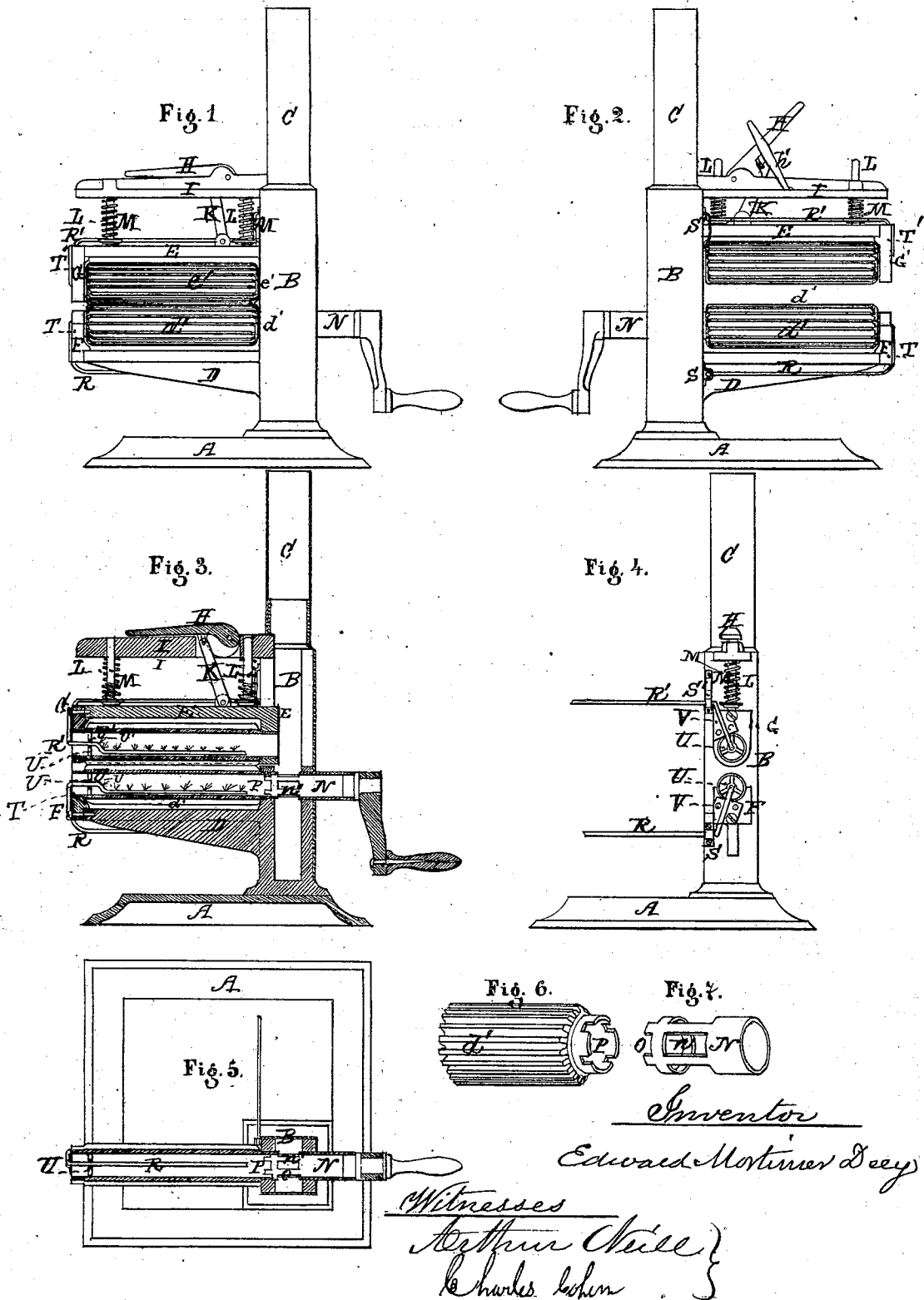


# EDWARD MORTIMER DEEY.

## Improvement in Fluting Machines.

No. 121,235.

Patented Nov. 28, 1871.



# UNITED STATES PATENT OFFICE.

EDWARD MORTIMER DEEY, OF NEW YORK, N. Y.

## IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. 121,235, dated November 28, 1871.

### *To all whom it may concern:*

Be it known that I, EDWARD MORTIMER DEEY, of the city, county, and State of New York, have invented certain Improvements in Fluting-Machines, of which the following is a specification:

This invention relates to that class of gas-heated machines which is employed for crimping or fluting ladies' frills, flounces, dress-trimmings, &c. The object of my invention is to produce a cheaper, more simple, and efficient fluting-machine than those in present use, especially those for which Letters Patent were granted to me March 22, 1870, and April 4, 1871. The nature of my improvement consists in directly connecting the hollow driving-crank (through which the gas and smoke from the lower roller are discharged into the chimney) with the lower fluted roller by a clutch-coupling formed by the serrated end of the hollow crank and the serrated end of the lower roller, which engages with and rotates with the upper roller, by means of which I am enabled to dispense with the ordinary gear-wheels and to remove the rollers for replacement by others when necessary; and it also consists in employing the chimney into which the ignited gas and smoke are discharged (from the gas-pipes which enter the rollers at their front ends) for bearings for the inner journal-ends of the rollers, the outer journal-ends of said rollers being sustained by brackets attached to the chimney, and so arranged that the removable caps of said brackets are recessed for reception of the gas-pipes, which have shields for protecting the fabric to be fluted from the said gas-pipes, as I will further explain by reference to the accompanying drawing, of which—

Figure 1 is a front elevation of a gas-heated fluting-machine embodying my invention; Fig. 2, a rear elevation; Fig. 3, a vertical and longitudinal section; Fig. 4, an end view, showing gas-pipes and shields; Fig. 5, a horizontal section through crank; and Figs. 6 and 7, views of serrated ends of roller and hollow crank-shaft, which form the clutch-coupling.

In the said drawing, A is the stand of the machine; B, the chimney bolted to the stand; C, the sliding or removable portion of the chimney; D E, the brackets attached to the chimney, which sustain the fluted hollow rollers at their outer ends in caps F G screwed to the brackets, the inner ends of said rollers being sustained in the chimney B, the bracket E, carrying the upper roller *e'*, being made to slide away from the bracket D, which sustains the lower roller *d'*, so as to admit of introducing the article to be fluted between the rolls. H *h'* is a lever and stay-bar, sustained in a stationary arm, I, extending from the chimney, said lever being connected, by a link, K, with the sliding bracket E, which has guide-rods L L and spiral springs M M for connecting the rollers after the sliding bracket is released from its leverage. N is the hollow crank-shaft, serrated at O for the purpose of engaging with the serrated end P of the lower roller *d'*, and having apertures *n'* for escape of the gas from the lower roller into the chimney, (see Figs. 3, 5, 6, and 7,) by means of which clutch-connection the machine is operated by the crank. R R' are the gas-pipes, sustained in bearings S S' attached to the chimney, the upper pipe R' sliding with the upper roll. Both gas-pipes, extending along the brackets to the front ends of the rolls, where they enter recesses T T' in the caps F G, are perforated to allow escape of the gas for ignition, (see Fig. 3,) are sustained within the rollers in bearings U U', and are covered, so as to prevent contact of the gas-pipes with the fabric while being fluted, by shields V V screwed to the caps F G.

### I claim—

The combination of the lower roll *d'*, with the clutch-coupling N O *n'*, and crank-handle, arranged with the chimney B C, as shown and described.

In testimony whereof I have hereunto set my signature this 2d day of October, 1871.

EDWARD MORTIMER DEEY.

### Witnesses:

ARTHUR NEILL,  
CHARLES COHEN.

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