M. J. McColl,

Artists' Wax Cutter.

No. 99928. Patented Feb. 15. 1870.

Fig 1

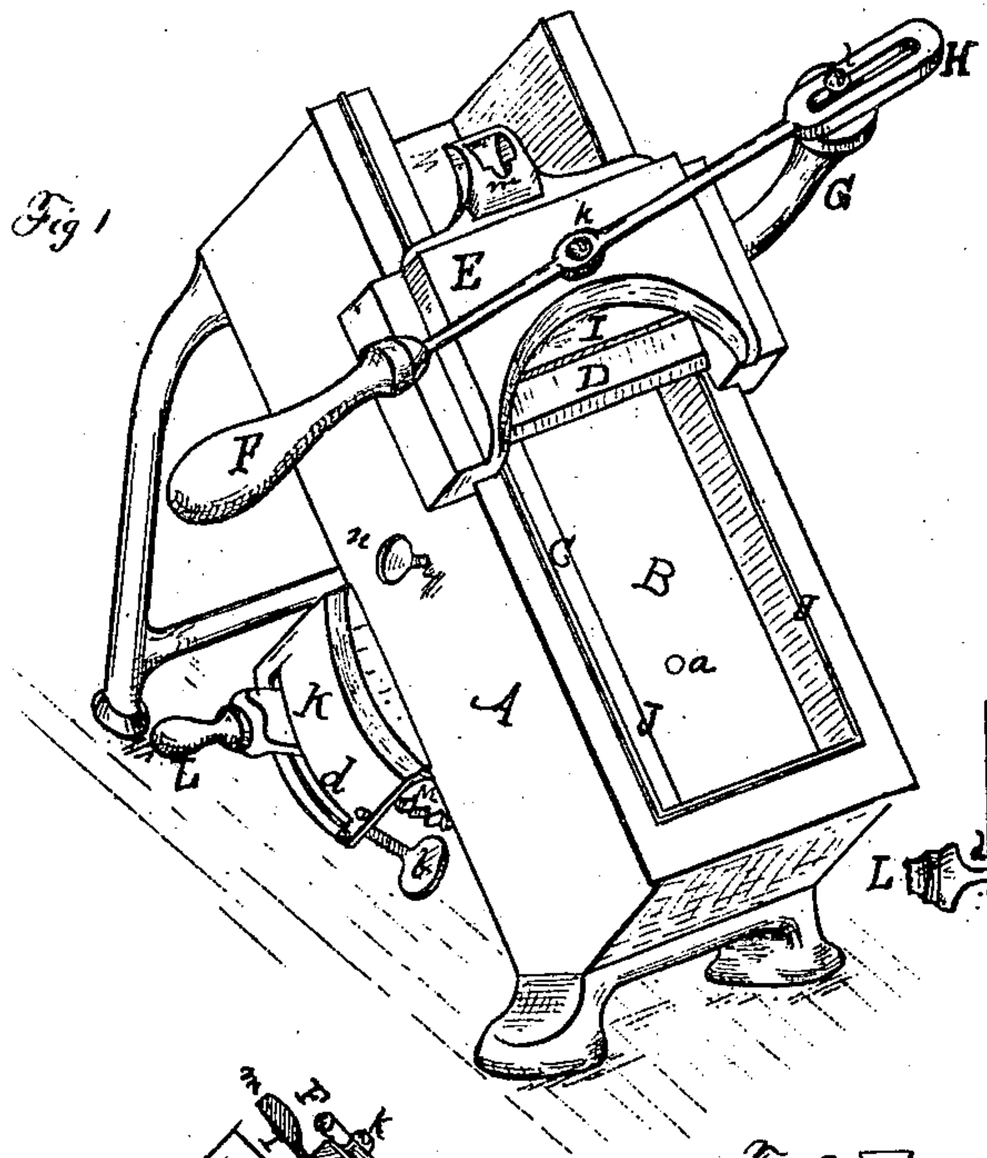


Fig 2

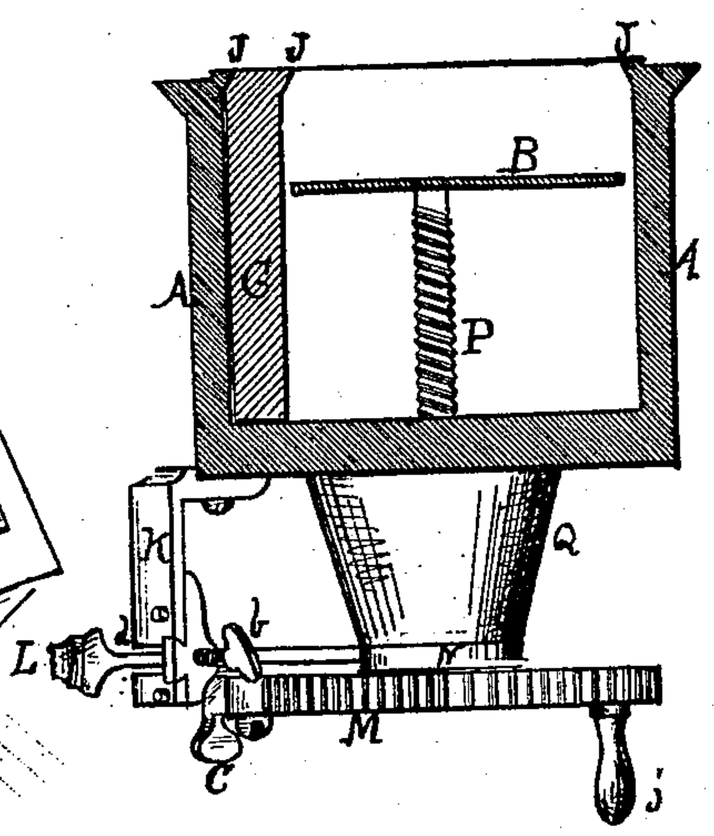


Fig 3

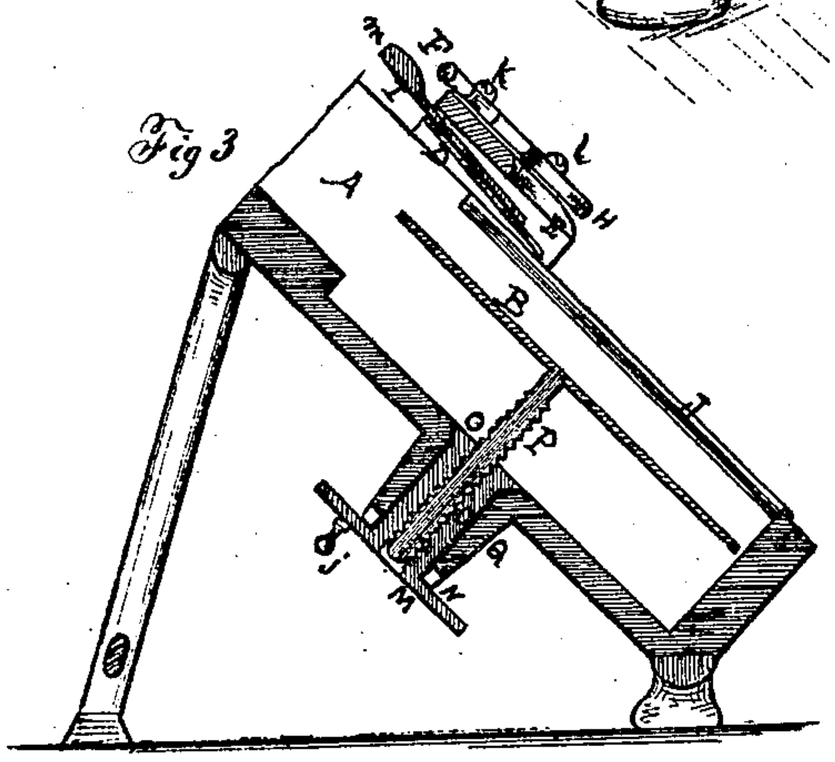


Fig 5

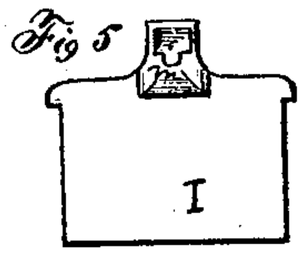
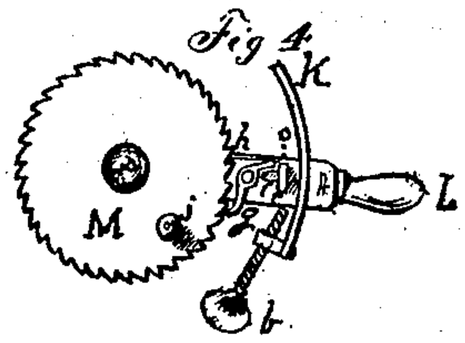


Fig 4

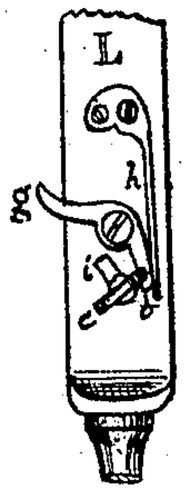


Witnesses

E. A. Wadt.

C. W. Bond.

Fig 6.



Mary Jane McColl

Inventor.

United States Patent Office.

MARY JANE McCOLL, OF CHICAGO, ILLINOIS.

Letters Patent No. 99,928, *dated February* 15, 1870.

MACHINE FOR CUTTING WAX FOR ARTIFICIAL FLOWERS, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MARY JANE McCOLL, of the city of Chicago, in the county of Cook, and State of Illinois, have invented certain new and useful Improvements in Machines for Cutting Artists' Wax; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view;

Figure 2, a vertical cross-section;

Figure 3, a longitudinal section;

Figure 4, a detached view of the lever and attachments for raising wax;

Figure 5, a view of the knife-heaters; and

Figure 6, a section of the lever with pawl and spring attached, enlarged.

Like letters refer to the same parts in all of the figures.

The nature and object of my invention consists in making the box for holding the wax adjustable in size, so that two or more widths of wax can be cut in the same machine; in providing the box with a smooth interior projection, so as to produce smooth edges on the sheets of wax cut in it; and in the blocks for heating the knife.

To enable others skilled in the art to make and use my improved machine, I will describe its construction and operation.

The box A is made of wood or metal, and is usually made one foot long, and four inches wide, interior dimensions, but may be made of any other size desired, and is mounted on suitable supports. I prefer those which give it an inclined position, as shown.

The box is open at the rear end, and is provided with a false bottom or plate, B, which is supported by the screw P.

The inner edges of the sides are provided with inclines J, as shown, and in order to vary the width of the sheets, I provide one or more false sides, C, which are fitted at their backs to the projection J, and are provided with similar projections, so as to preserve this feature of the box when used.

These false sides are held in place by the screw *n*, or by any other suitable device.

The upper and outer edges of the sides are also provided with projections, which fit into corresponding grooves in the knife-head, and hold and guide it in operation.

The knife-head E is made of metal, or partly of wood, in the form shown, and is provided with a thin sharp knife, D, which extends across the box, and rests upon it at the edge.

Between the knife and the bridge there is left an open space for the reception of the heater I, as shown at fig. 3.

This head is operated by means of the lever F, which is pivoted to it at *k*.

The fulcrum of the lever is at *l*, on the arm G, and the lever is slotted at H, so as to permit the knife-head to move in line with the box. If preferred, this slot can be made at *k*.

The heater I is a bar of iron, made to fit in the space between the knife and the bridge, and as it, in use, is too hot to handle with the hand, it is provided with a recessed opening, *m*, so as to be handled with a removable handle, and also with ears or other projections to keep it in place. To prevent delay, I use two of these for each machine.

By placing a heater on the knife, it is kept at a temperature sufficiently high to prevent the wax from cracking while being cut; enables me to cut thinner sheets, and to some extent assists in cutting.

The screw P is operated by means of a ratchet device attached to the lever L, which engages the teeth on the spur-wheel M.

This wheel is made a part of or firmly attached to the shaft or cylinder O, which is provided with a female screw, through which P runs, as shown at fig. 3, and is supported by surrounding support Q, as it is required to be of sufficient length to operate the screw to the extent of the depth of the box A.

The inner end of the lever L is supported by the collar N, which rotates on the cylinder O, and the outer end by a pendent projection, K, which is provided with a slot, *d*, through which the lever passes.

The movement of the lever is adjusted by the set-screw *b*, so that the pawl *g* may be made to engage with each tooth, and from that to each sixth tooth, so as to regulate the thickness of the sheets of wax cut, and make them uniform.

The ratchet or pawl *g* is provided with an extended heel, *o*, against which a spring, *h*, presses to insure its operation, and in order to disengage the pawl, so that the screw P may be run down by taking hold of the handle *j*.

There is placed on the opposite side of the heel an eccentric, *i*, which is operated by the thumb and finger-piece *c*.

By turning *i* against the heel *o*, the pawl will be held permanently disengaged; by turning it off, as shown at fig. 6, the pawl will operate the wheel M.

In operation, the false bottom B is drawn down into the recess, shown at fig. 3, and the wax heated, so as to adhere to it sufficiently to prevent being drawn back, when, by operating the lever L, the wax will rise in the box and the cutting commences. The projections J compress the sides so as to produce even edges, and thus complete the sheets as soon as cut for the market, without any trimming.

When the machine is used full width, the false side C is taken out, and an additional false bottom of the

full width of the box, but of the same form as B, is screwed to B by means of the holes *a*, so that by the use of false sides, and extra false bottoms, the dimensions of the sheets can be readily changed, and the thickness also by the screw *b;* and if great thickness is desired, a second movement may be given to the lever L before applying the knife.

Having thus fully described my improved machine,

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

1. The interior projections J, for compressing and preserving the sides of the sheets, substantially as specified.

2. The false sides C, for changing the size of the sheets, substantially as set forth.

3. The employment of extra false bottoms, in combination with the false sides C, substantially as and for the purposes described.

4. The heaters I, when provided with recessed openings *m*, in combination with the cutter-head E, substantially as and for the purposes specified.

5. The combination of a box, A, adjustable to different sizes, and provided with the projections J, with the bottom B, screw P, wheel M, lever L, provided with the pawl *g*, and cutter-head E, when constructed and operating substantially as set forth.

MARY JANE McCOLL.

Witnesses:

L. L. BOND,

O. W. BOND.