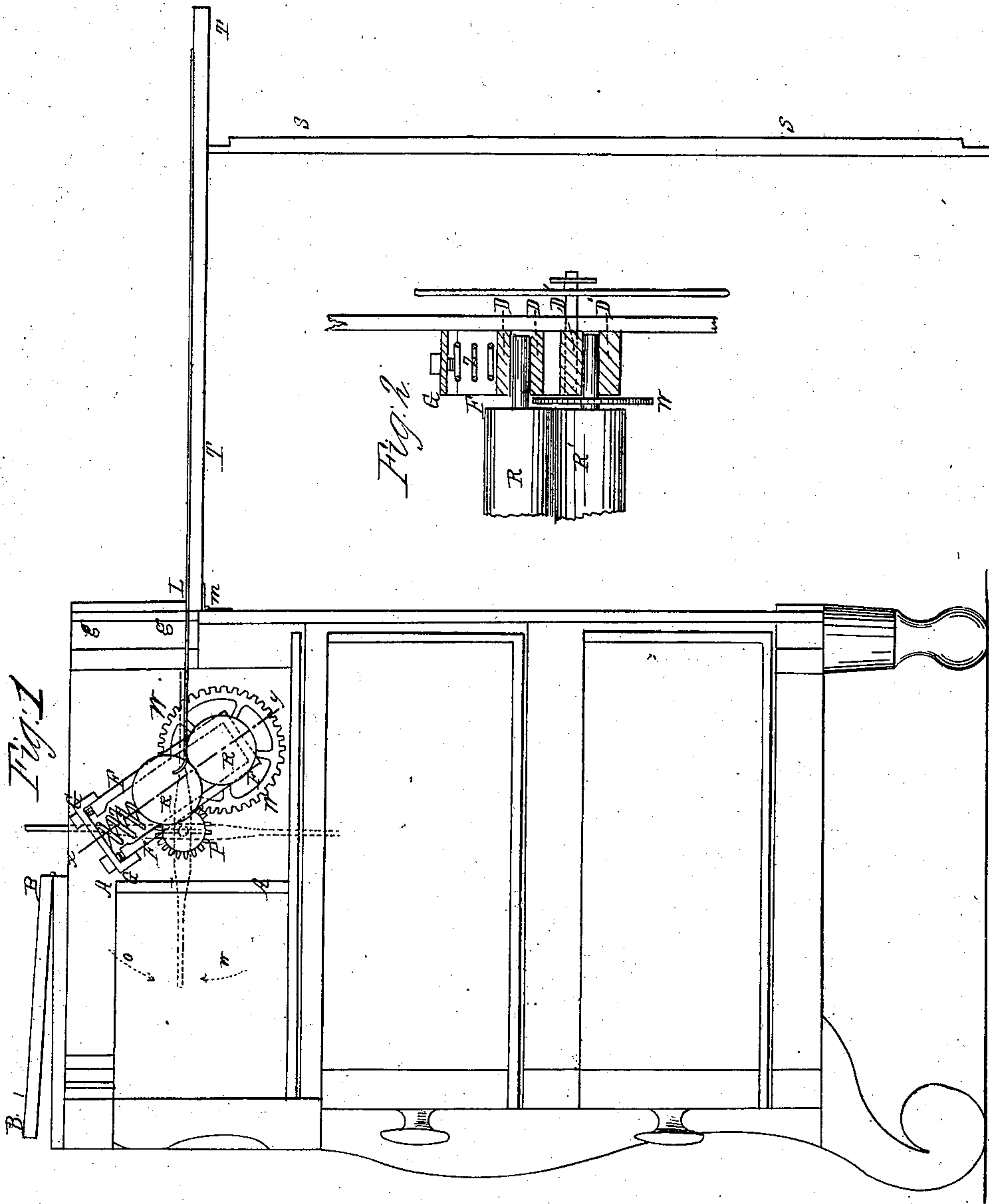


No. 20,002.

PATENTED APR. 20, 1858.

S. NOWLAN.
DOMESTIC MANGLE.



UNITED STATES PATENT OFFICE.

SAMUEL NOWLAN, OF NEW YORK, N. Y.

DOMESTIC MANGLE.

Specification of Letters Patent No. 20,002, dated April 20, 1858.

To all whom it may concern:

Be it known that I, SAM. NOWLAN, of the city, county, and State of New York, have invented certain new and useful Improvements in Mangles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms part of this specification, and in which—

10 Figure 1 represents a vertical section through a piece of furniture commonly called dressing-bureau, and Fig. 2 a cross section through the line $x y$ of the mangle.

My invention consists in the peculiar construction and arrangement of the mechanism of a mangle, whereby the apparatus without losing its efficiency is reduced to such compactness as to enable it to be combined with any suitable article of furniture, 20 which will serve the two purposes of a mangle and of a furniture adapted to such other uses as made for.

To enable others to make and use my invention I proceed now to describe its construction and operation.

The general construction of the bureau presents no particular feature of novelty with the exception of the following: The first or upper drawer does not extend 30 throughout the whole depth of the bureau. The backboard A is secured at right angles to the sides and the bottom of the drawer so as to occupy about the middle of the depth of the bureau when the drawer is shut, thus leaving a space behind it where 35 the mangle is located. The cover or top plate of the bureau is made of 2 halves which are hinged together so as to fold and allow the rear half to lap over the front one as shown in the annexed drawing. On 40 lifting the rear plate or on folding it over the hinges, the mangle is uncovered and ready to be operated upon. Another peculiarity of the construction of the bureau 45 consists in the addition of an adjustable table T hinged to the backboard of the bureau at m . This table when not in use is let down, when it lies flat against the backboard, so that the bureau may be placed 50 against the wall of the room. But when the mangle is used the table is lifted up to the horizontal position shown in Fig. 1, in which position it is secured by means of a strut S, which when out of use is set in the

side grooves g thus completing the back of 55 the bureau.

The mechanism of the mangle consists in two rollers R and R' the journals of which are set in suitable metal bushes D and D'. These are placed in a frame F which is permanently secured to the inner sides of the 60 bureau. I would recommend that the bushes D' or those of the lower roller be permanently fixed into the bottom of the frame F for the purpose of securing the 65 proper relation of the gearing parts and to render them less liable of getting out of working order.

To one of the journals of the lower rollers and between the end of said roller and the 70 bushes is a cog wheel n which meshes into and is operated by a pinion P supported by a bracket cast onto the side of the frame F. This pinion has a shaft the end of which projects out of and through the side of the 75 bureau and is provided there, with a set of levers L or a crank or flywheel as the case may be.

The bushes incasing the journals of the upper roller are loose in the frame and are 80 therefore liable of an up and down sliding motion within the guides or sides of the frame. To give the requisite pressure of one roller onto the other, I use a powerful spring F which is inserted between the top 85 of the bushes D and the plate G, which is adjustable by means of screws or bolts for the purpose of increasing or diminishing the intensity of pressure of one roller onto the other. The roller R is provided with 90 an apron L one end of which is fixed in a slot of the cylinder R. Other equivalent means of securing the end of the apron to the cylinder may be used.

The mangle is so arranged in relation to 95 the other parts of the apparatus, that the surface of the table T should be in a plane tangent to the cylinder R and that the axes of the 2 rollers R and R' shall not be in a perpendicular plane, but that they shall 100 occupy an inclined position in relation to each other.

The operation is as follows: When the bureau is to be used as a mangle, the table 105 T is lifted so as to occupy a horizontal position. The strut S is then taken out of the groove and placed upright beneath the table to support it. The crank is then put

in motion in the direction of the arrow *o*, whereby the apron is unwound. The cloth to be mangled is then slightly wetter, folded and laid on the apron and this done the
5 crank motion is reversed *i. e.* turned in the direction of the arrow *w*. By this operation the apron is wound up together with the cloth. After the cloth has been rolled and pressed sufficiently, the crank motion
10 is again reversed and the apron rolls out with the cloth completely mangled, which latter is then removed.

I do not confine myself to the application of mangles constructed and arranged as
15 above described, to bureaus only, as sub-

stantially the same principle of construction can be applied to any kind of furniture such as wardrobes, tables, desks, etc.

Having now fully described my improvement what I claim as my invention and desire to secure by Letters Patent is— 20

The mechanism of a mangle constructed and arranged in relation to and in combination with parts of any suitable articles of furniture in the manner and for the
25 purposes specified.

SAMUEL NOWLAN.

Witnesses:

WM. HUTCHINS,
JAMES HUTCHINS.