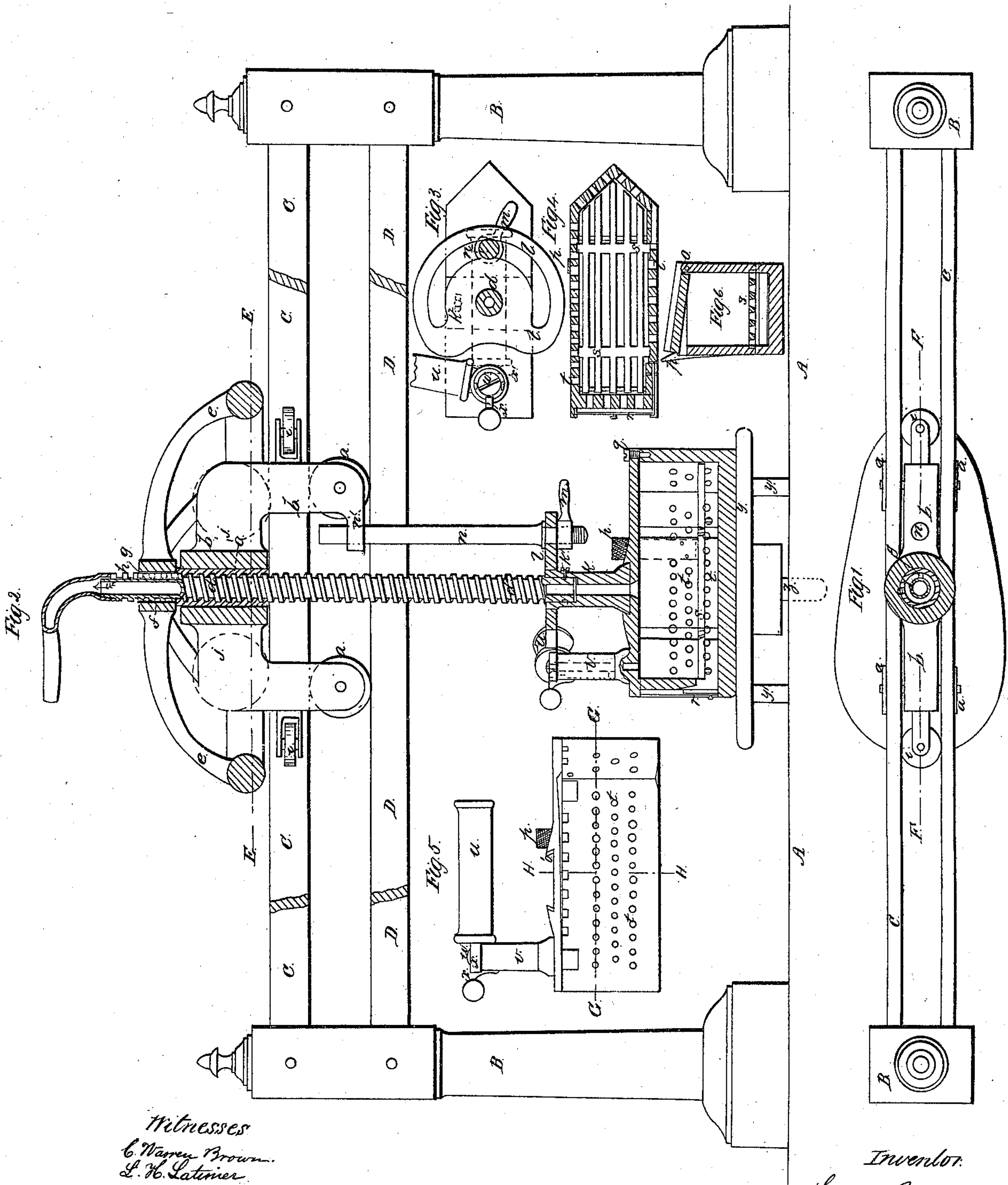


# *L. Berenger.*

## *Ironing Mach.*

*N<sup>o</sup> 88,437.*

*Patented Mar. 30, 1869.*



*Witnesses*  
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# United States Patent Office.

LAURENT BERENGER, OF PARIS, FRANCE.

Letters Patent No. 88,437, dated March 30, 1869.

## IMPROVEMENT IN IRONING-MACHINE.

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, LAURENT BERENGER, tailor, of 13 rue Gaillon, city of Paris, Empire of France, have invented certain new and useful Improvements in Machinery for Ironing and Pressing Cloth or other materials; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

To carry my invention into practice, I suspend the iron to be made use of on a frame provided with rollers, or wheels, which frame traverses on rails, or on a platform fixed above the cloth or material to be ironed or pressed.

I suspend the iron to this frame by a hollow screw, or other mechanical appliance, which serves to lift the iron from the material to be operated upon, and to give any desired pressure, by means of the iron upon the said material.

The screw is made hollow, to serve as a chimney to convey the products of combustion from the iron when it is heated, as I prefer that it should be, by an inside fire of charcoal, gas, or other fuel.

I also prefer to construct a slightly-raised platform, upon which the cloth or material is placed to be operated upon. This platform turns upon a central pin, or pivot, so that the cloth or material upon it can be submitted to the action of the iron in any direction.

The accompanying drawing illustrates the most convenient methods with which I am acquainted to carry out the principles of my invention.

The same letters indicate the same parts throughout all the figures.

Figure 1 is a plan through the line E E, fig. 2, partly in section.

Figure 2, a front elevation, partly in section, through F F, fig. 1.

Figure 3, plan of the iron, when in position in the machine.

Figure 4, plan of iron in section, through G G, fig. 5.

Figure 5, longitudinal elevation of iron.

Figure 6, transverse section of iron through H H, fig. 5.

A, fig. 2, is a strong table, supporting the apparatus above it by the two standards B B.

The upper ends of these standards support the extremities of the rails, or platform, composed, in this case, of four parallel bars of iron, C C, D D.

Between the upper pair of bars, C C, and the lower pair of bars, D D, are the rollers *a a a*, carrying the frame *b*, in which is fixed the nut *c*.

In the nut *c* works the hollow screw *d*, which screw *d* is turned round, and lowered or raised by the fly-wheel *e*, through the centre of which an unthreaded aperture, *f*, allows the screw to pass.

In this aperture, or hole *f*, is fixed a key, *g*, which fits easily into a groove, or slot, *h*, cut down the length of the screw.

When the fly-wheel is turned, the key *g*, acting in

the slot *h*, turns the screw round, but the aperture in the wheel *f* and the slot *h* allows the screw to rise and fall without changing the height of the wheel.

Attached to the frame *b* are the side-guiding rollers *i i*, and, if preferred, I add a further pair of rollers, *j j*, indicated in red lines, fig. 2, which work upon the upper surface of the bars C C.

In this way the frame *b* is supported, and allowed to glide freely backward and forward along the course of the rails C C, D D, carrying with it the screw *d*.

The bottom of the screw is fitted with and supports a socket-piece, *k*, which turns freely round the screw, being connected to the same by the little screw *k'*, which enters into a groove cut in the bottom, plain part of the screw.

The upper part of the socket-piece *k* carries the quadrant *l*, attached to, or forming one piece with it.

The piece *k* and quadrant *l* can be set in any required position, by the nut and handle *m*, upon the lower end of the rod *n*, the upper end of which rod *n* enters into a hole in the arm *n'* of the frame *b*.

The lower end of the socket-piece *k* is dovetailed, to receive the iron to be made use of, and is fitted with a set-screw, *k''*, to hold the iron when placed in position. (See dotted lines, fig. 3.)

The iron I prefer is made with the lateral edges rounded off, to mount the seams, but with the point left square, to penetrate and open the seams, and I modify the form according to the fuel to be employed.

The iron represented in the drawings is a hollow iron, to be employed when charcoal is used as the fuel. Its upper part has the dovetail *o'*, by which it is attached to the socket-piece *k*. The upper part may be hinged to the iron at *o*, forming a lifting-lid, as seen in fig. 6, and retained by the spring-catch *p*, when shut down; or it may be turned horizontally upon a pivot, *q*, as arranged at fig. 2.

The iron may also be fitted with a sliding door, *r*, at the back, to remove the ashes.

The fuel is supported by the movable grate *s*, and air is admitted, for combustion, by the holes *t*, which are made in a direction oblique to the sides, to prevent the fall of ashes upon the material being pressed.

Whatever form of iron is used, it is fitted with a handle, *u*, turning horizontally upon the standard *v*, to which it is attached by a screw, *w*.

The handle is retained in different positions by a spring, *x*, which enters into little grooves cut in the portion of the handle at *x'*.

This handle serves to remove from and to place the iron in the machine, and also enables the workman to use it as an ordinary iron, without the machine, if occasionally required to be worked by hand. In such case the position is indicated in red lines, fig. 3.

*y* is the raised platform, upon which the cloth is placed to be ironed, supported on legs *y'*, and turning, as required, upon the central pin *z*.

Having now described the nature of my invention, and the best means with which I am acquainted for carrying it into practice,



I claim—

1. A travelling frame, *b*, provided with rollers *a a* and guide-rollers *i i*, working upon said rails, or platform, carrying a screw, to which an iron, fixed or movable, is attached, and by which pressure, or not, as required, can be given to the material to be ironed or pressed, substantially as described.

2. A hollow screw, serving the double purpose of carrying off the products of combustion, and also of adjustment of the iron, substantially as described.

3. The platform *y*, capable of being turned upon its

centre, combined with the iron-supporter, arranged to be raised and lowered, substantially as described.

4. The iron, constructed with means for internally heating it, with an outlet for the products of combustion, and adapted for attachment to its hollow support, substantially as shown and described.

In testimony whereof, I have hereunto set my name, in presence of two subscribing witnesses.

Witnesses: LAURENT BERENGER.

F. OLCOTT,  
WM. MORGAN BROWN.