

A. CATTANEO.  
MACHINE FOR FULLING HAT BODIES.

No. 75,122.

Patented Mar. 3, 1868.

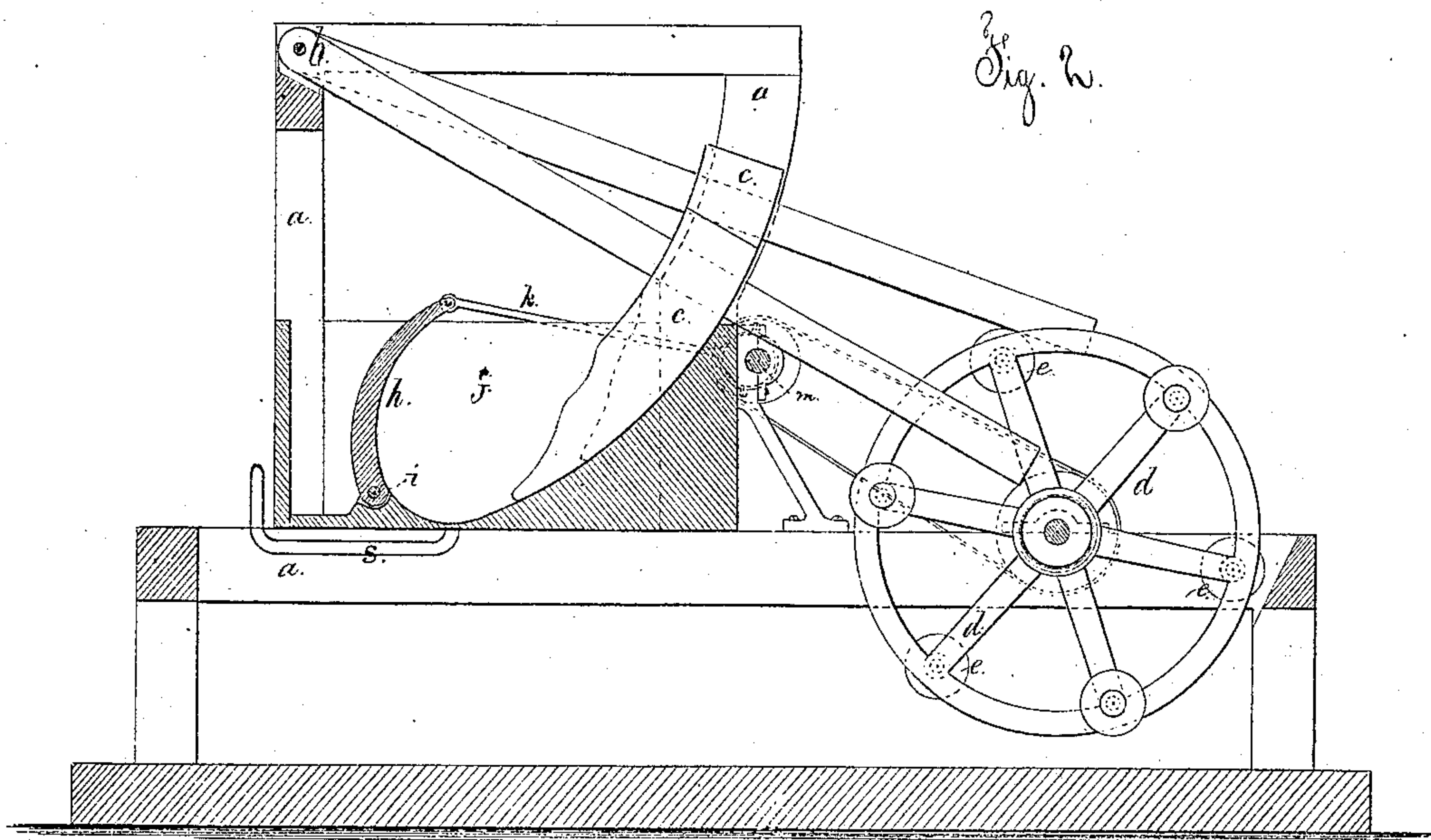
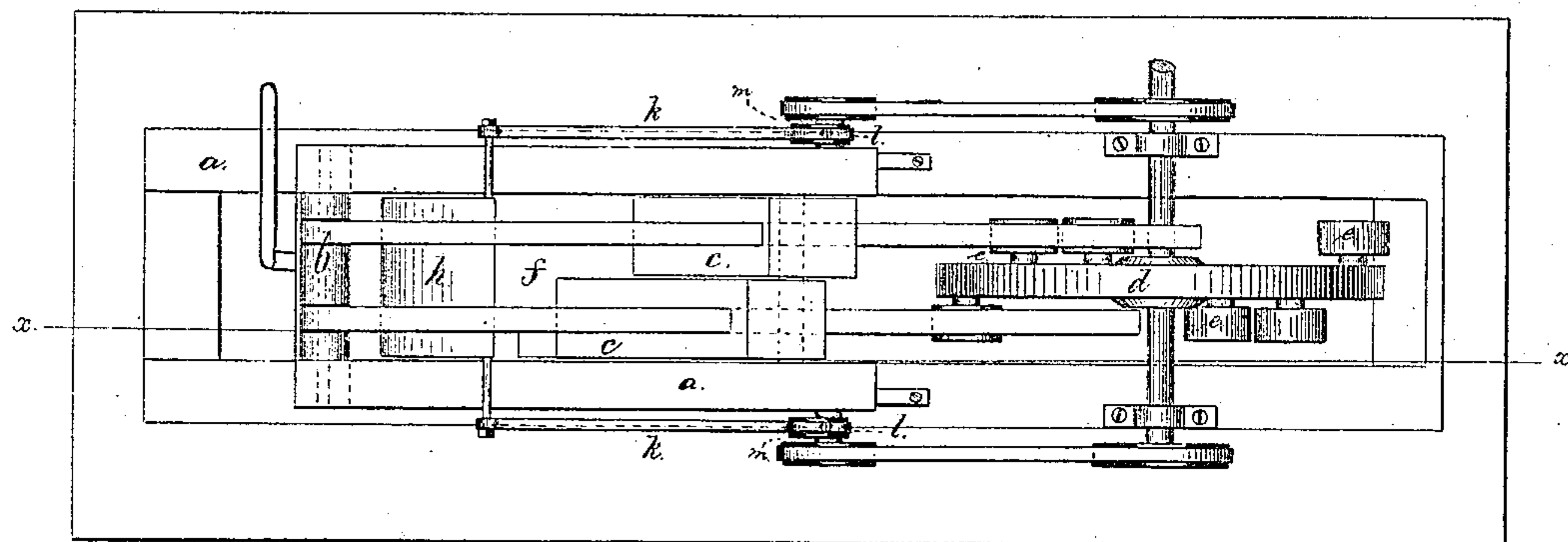


Fig. 1.



Witnesses.

Geo. A. Walker  
Chas. H. Smith

Angelo Cattaneo  
per L. M. Perrell.  
Atty

# United States Patent Office.

ANGELO CATTANEO, OF NEWARK, NEW JERSEY.

Letters Patent No. 75,122, dated March 3, 1868.

## IMPROVEMENT IN MACHINES FOR FULLING HAT-BODIES.

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, ANGELO CATTANEO, of Newark, in the county of Essex, and State of New Jersey, have invented, made, and applied to use a certain new and useful Improvement in Fulling or Sizing Hat-Bodies; and I do hereby declare the following to be a full and correct description of the construction and operation of the same, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a plan of the said machine, and

Figure 2 is a vertical section at the line *x x*.

Similar marks of reference denote the same parts.

Heretofore hat-bodies and similar articles have been fulling so as to thicken them, and bring them to the proper size by the action of hammers. In this character of machine the hats are apt to become matted together, and not uniformly operated upon in consequence of the mass not moving around regularly in the machine, so that some are operated upon by the hammers more than others, and constant manual labor has been required to cause the proper continuous movement in the mass of hats, by pulling them up from time to time to loosen them, so that the felting operation may be uniform.

The nature of my said invention consists in a hinged swinging side to the fulling-box, that by its constant movement causes the mass of hats to move around regularly in the apparatus, and hence be fulling or felted with uniformity, and manual labor is almost entirely dispensed with during the operation.

In the drawing, *a* is a frame, carrying the fulcrum *b* of the hammers *c c*, the levers of which extend to the wheel *d* that is driven by competent power, and provided with rollers *e e* that are alternated on opposite sides of said wheel, and raise first one hammer *c*, and allow it to drop, and then raise and drop the next.

The hammers *c c* operate within the box *f* in the usual manner of fulling or sizing-machines. The box *f* is provided with the hinged side-piece *h*, that is swung back and forth on the hinge *i* by means of the connecting-rods *k*, cranks or eccentrics *l* on the shaft *m*, that is driven by power from the shaft of the wheel *d*. The operation of the movable side *h* is to keep the hats moving regularly, that the felting operation may be uniform throughout the mass, as aforesaid, the action of the hammers being to force the mass of hats up against the side *h*, and that, by its movement, throwing the upper portion of the mass over, that the hats may full, and be again passed by the hammers in under the mass.

A steam-pipe, *s*, is to be introduced to heat the contents of the box.

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

The side-piece *h* to the box *f*, fitted to swing on the hinge *i*, in combination with the hammers *c c*, the parts being arranged and operating substantially as and for the purposes set forth.

In witness whereof, I have hereunto set my signature, this twentieth day of December, A. D. 1867.

ANGELO CATTANEO.

Witnesses:

CHAS. H. SMITH,

GEO. T. PINCKNEY.