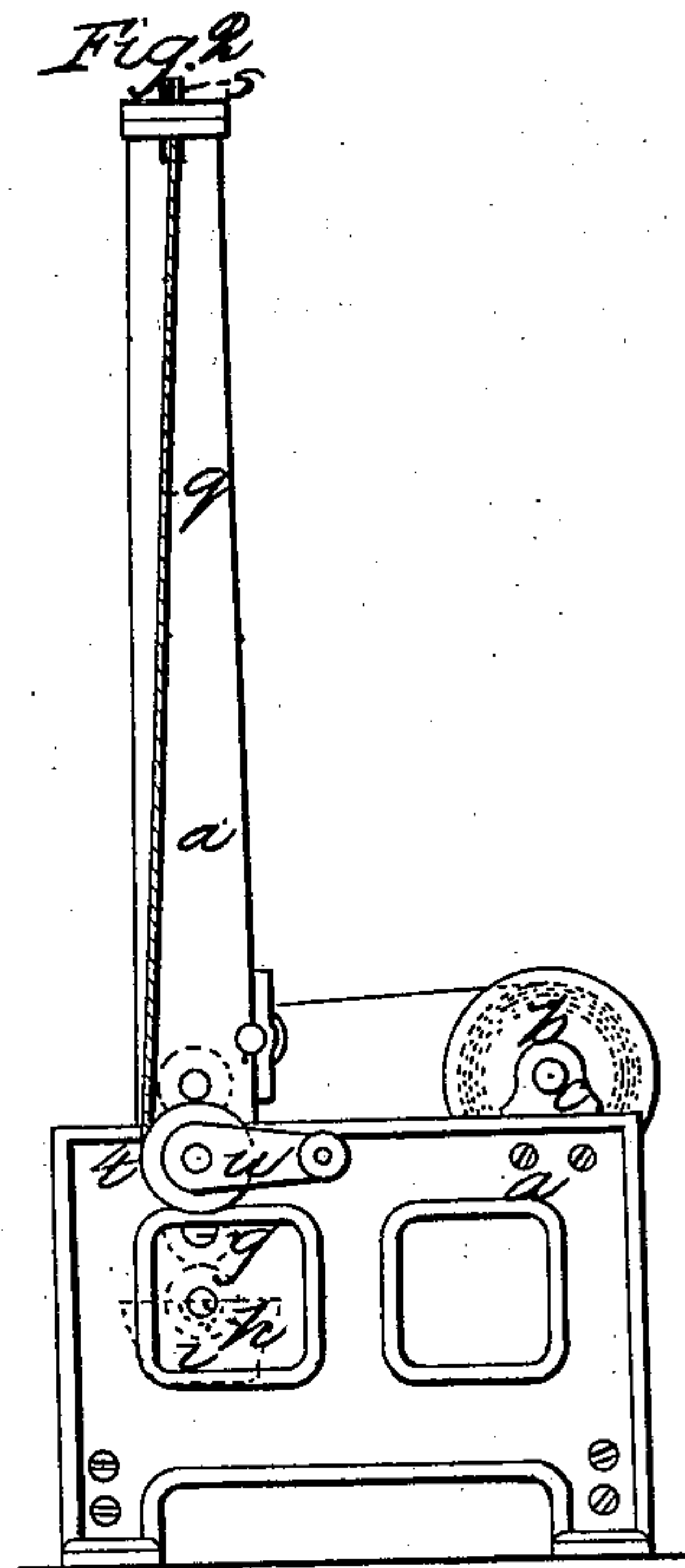
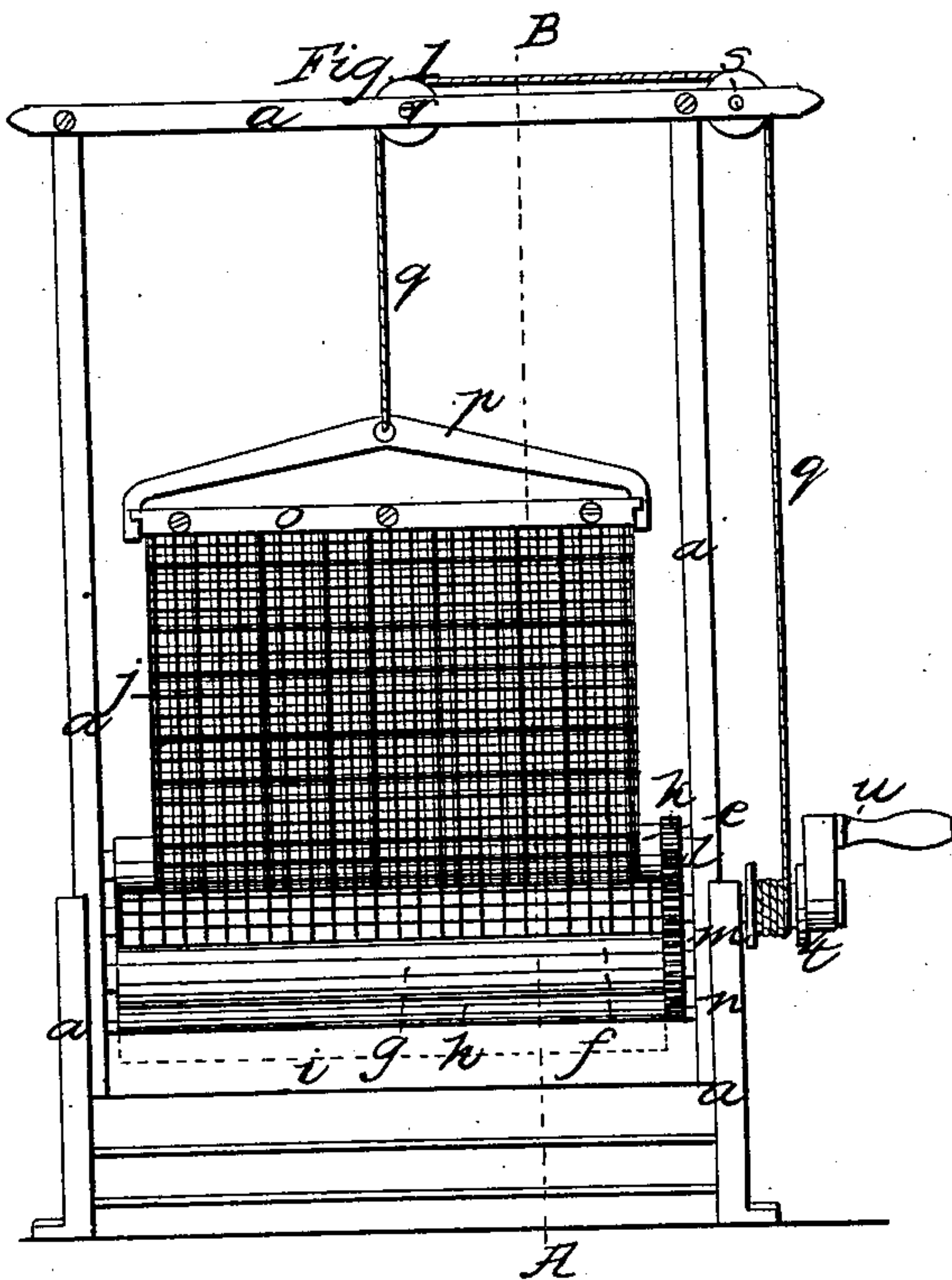


C. H. Waters,

Painting Figures on Wire Cloth.
 No 84,521. Patented Dec. 1, 1868.



Witnesses:

Geo. F. Wright

H. H. Waters

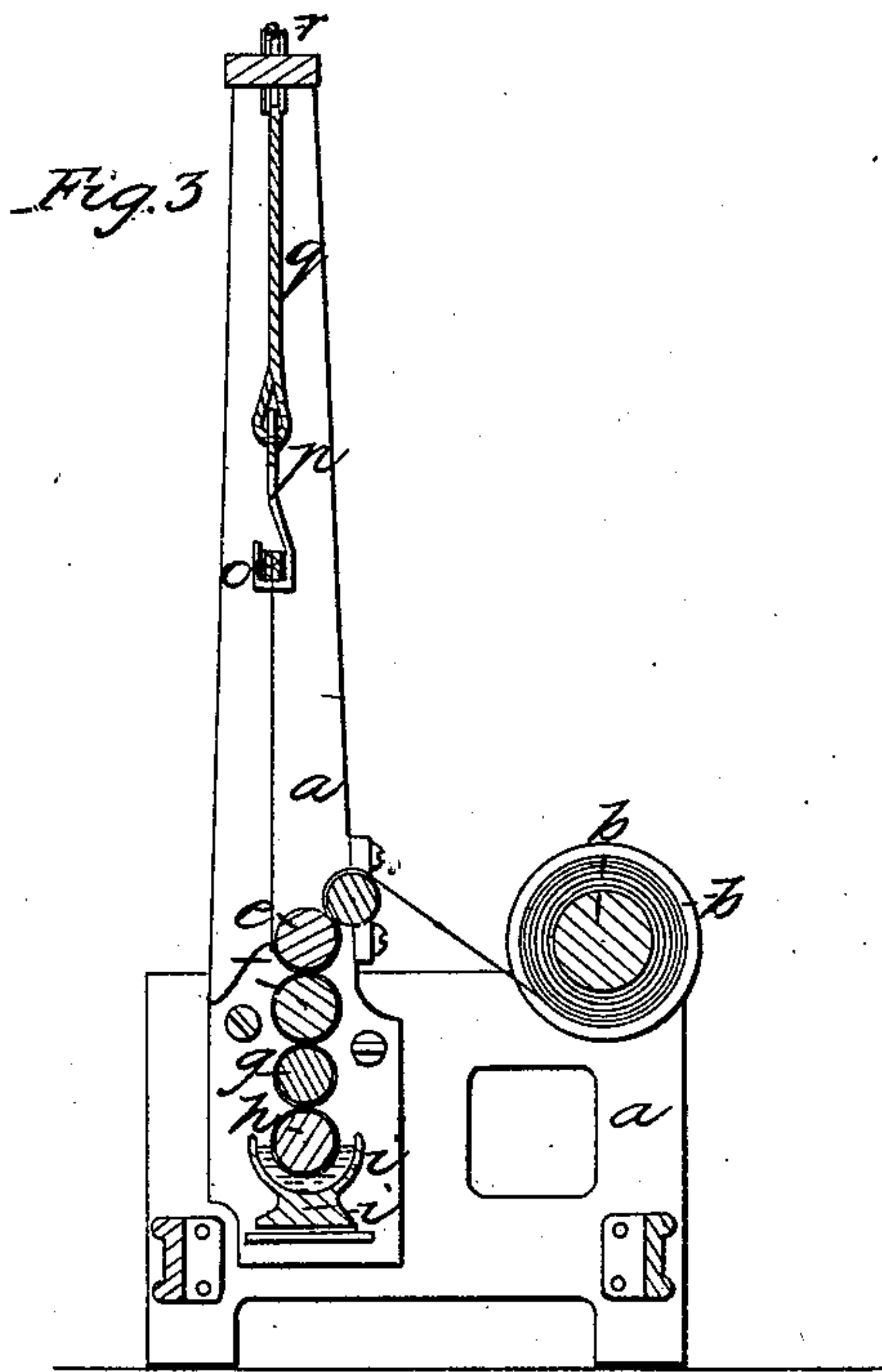
Inventor:

C. H. Waters.

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2 Sheets, Sheet 2.

Painting Figures on Wire Cloth.
N^o 84,521. *Patented Dec. 1, 1868.*



Witnesses:

Geo. F. Myers-
H. H. Waters,

Inventor.

C. H. Waters,

UNITED STATES PATENT OFFICE.

CHARLES H. WATERS, OF GROTON, MASSACHUSETTS, ASSIGNOR TO THE
CLINTON WIRE CLOTH COMPANY.

MACHINE FOR PRINTING FIGURES ON WIRE-CLOTH.

Specification forming part of Letters Patent No. 84,521, dated December 1, 1868.

To all whom it may concern:

Be it known that I, CHARLES H. WATERS, of Groton, county of Middlesex, and State of Massachusetts, have invented a new and useful Machine for Painting Figures upon Wire-Cloth; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The present invention relates to a new and useful mode of painting figures upon wire-cloth; and consists, first, in supporting upon suitable bearings in the machine a roll having wound upon it the pieces of wire-cloth intended to receive the figures exactly parallel with the figuring-roll; second, in a series of rolls, comprising two plain paint-rolls—one figuring-roll, and one a top or pressure roll; third, in a mechanism to draw up the cloth, as the figure is imparted to it by the figuring-roll, to a height corresponding with the length of said pieces of cloth.

Figure 1 is a front elevation of the machine. Fig. 2 is an end view of the same; Fig. 3, a vertical section through from A to B in Fig. 1.

a a represent the frame-work of the machine, supporting all the working parts, of which *b* is a roll or beam, having wound upon it the pieces of wire-cloth to be figured, supported in the boxes *c c* upon its journals *d d*.

Running exactly parallel to said roll *b*, and supported in the upright standards of the frame-work *a a*, is a plain pressure-roll, *e*, and in the exact vertical plane immediately below are hung the figuring-roll *f* and the paint-rolls *g* and *h*.

A portion of the roll *h* being immersed in the paint contained in the paint-trough *i*, and running in close proximity to the roll *g*, a sheet of paint of the desired thickness is left upon said roll, which by coming in contact with the figuring-roll *f*, the paint is communicated or transferred to it, and thence to the cloth *j*.

k, l, m, and *n* are gears secured to the end of rolls *e, f, g*, and *h*; *o*, a clamp secured to the cloth *j*, and *p* a metallic bow-shaped device, provided with sockets to receive the ends of the clamp *o*, being attached to the rope *q*,

running over the grooved rollers *r* and *s* to the flanged roll *t*, which is secured to the shaft of the roll *f*, being made of the proper diameter to draw up the cloth as fast as it is figured; and *u* is a crank upon the shaft of said roll *f*.

Having described the manner in which the devices composing my machine are arranged, I will now proceed to show how the same operate together.

The pieces of wire-cloth to be figured are wound upon the roll *b*. The end of a piece is then inserted between the pressure-roll *e* and the figuring-roll *f*. The attendant turns the crank *u*, attached to roll *f*. The cloth is then seized by said rolls and carried through in a horizontal direction, receiving the figure imparted to it by the roll *f* upon the lower side. A clamp, *o*, is then secured to the end and placed in the sockets of the lifting device *p*, which is secured to a rope, *q*, which passes over the grooved rolls *r* and *s* to the flanged roll *t*, which is secured to the shaft of the roll *f*, being made of a proper size to draw up the cloth as it passes through between said rolls.

This machine is intended to be placed at the bottom of a drying-room of any desired height, having the rolls *r* and *s* at the top, and when the piece of cloth has passed through the process of being figured it is drawn to the top and lifted from the sockets in device *p*, and suspended upon brackets so arranged as to receive the projecting ends of the clamp *o*.

The peculiar advantages of a high drying-room in connection with this machine are obvious and valuable, from the fact that a better circulation of air is obtained thereby, and a great number of pieces can be hung in a very small space without chafing or injuring each other.

The process heretofore has been by hand-labor, the cloth being moved along horizontally during the process of painting and figuring, then suspended upon hooks or wound up before sufficiently dry, thereby materially injuring the goods.

Having thus described my improvements, what I claim as new therein, and desire to secure by Letters Patent, is—

The combined arrangement of wire-cloth

and mechanism herein described for painting figures upon wire-cloth, consisting of a roller having the figures to be painted engraved thereon, and a pressure-roll, between which rollers the wire-cloth is passed, a trough of paint, and the rolls by which the paint is applied to the engraved roll, and the mechanism by which the cloth is drawn away from

said rollers after the figures are painted thereon, substantially as herein described and set forth.

C. H. WATERS.

Witnesses:

GEO. F. WRIGHT,
H. H. WATERS.