(No Model.) 2 Sheets—Sheet 1.

D. GESTETNER.

Apparatus for Producing Copies of Writings.

No. 242,919. Patented June 14, 1881.

Fig: 1.

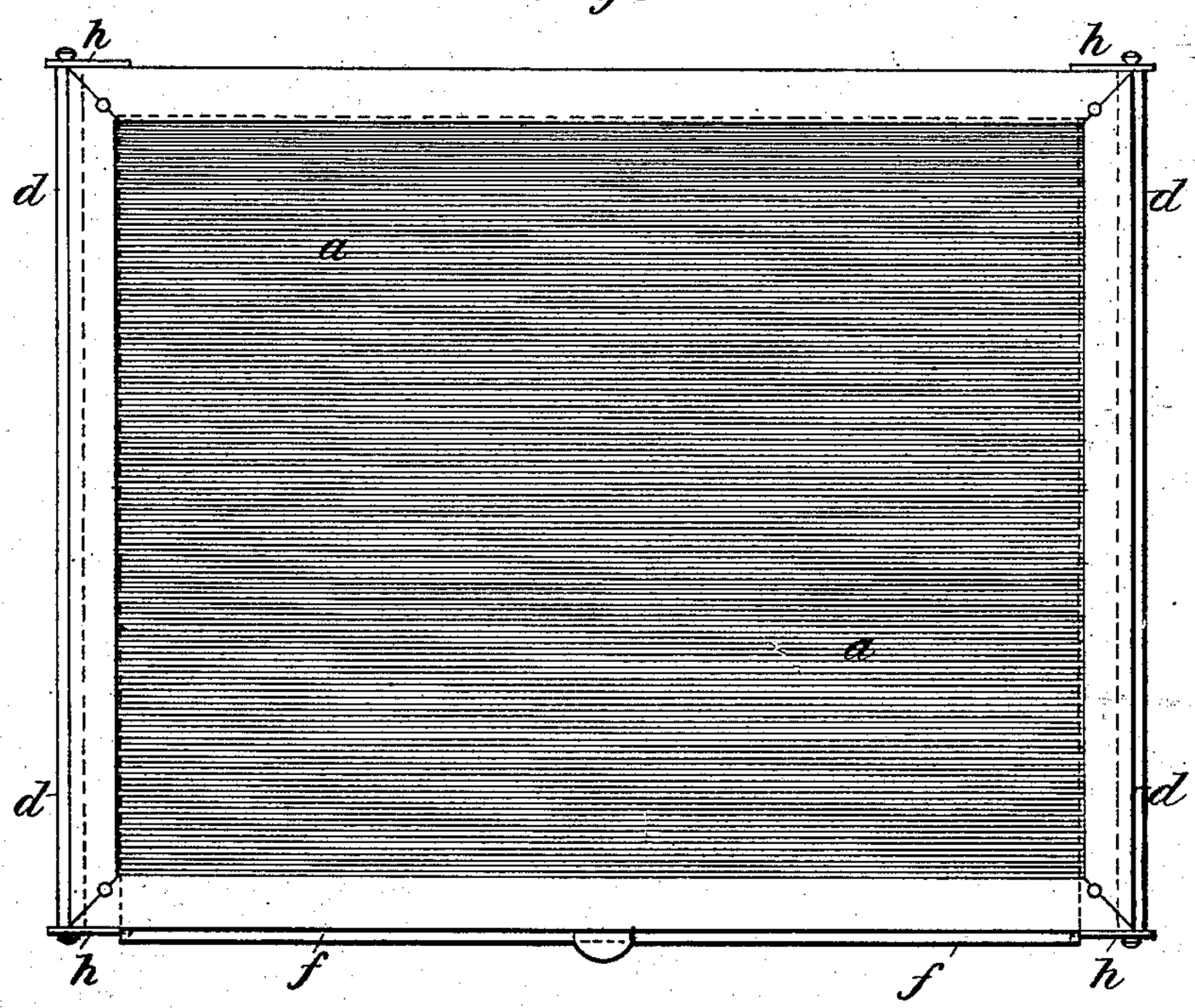
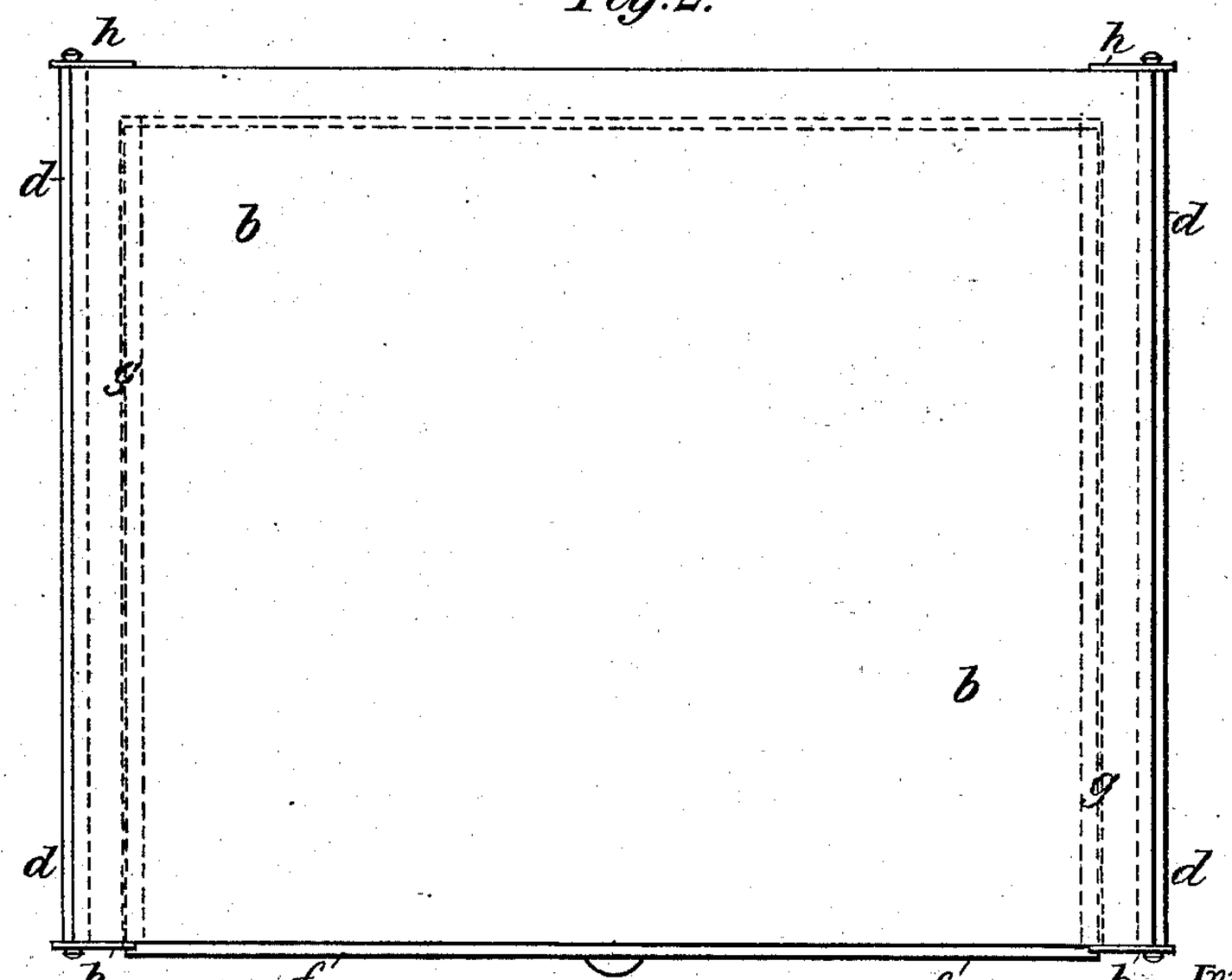


Fig: 2.



Attest
Geo. T. Smallwood Jr.

Inventor
David Gestetner
By Knight Bros Attys

(No Model.) 2 Sheets—Sheet 2.

D. GESTETNER.

Apparatus for Producing Copies of Writings.

No. 242,919. **Patented June 14, 1881.**

Fig: 3.

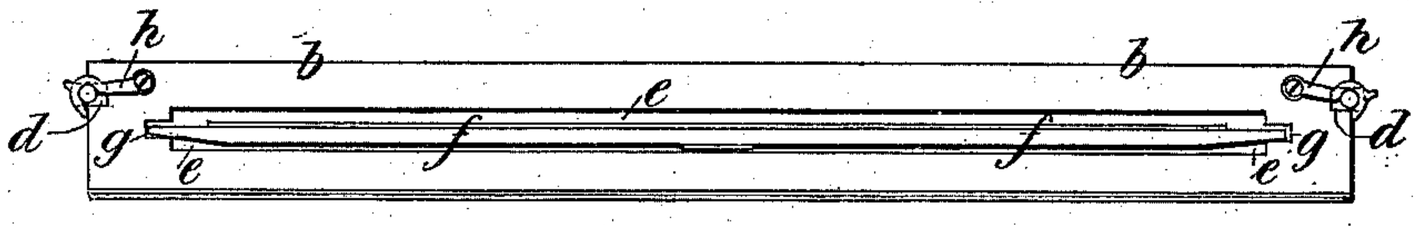


Fig: 4.

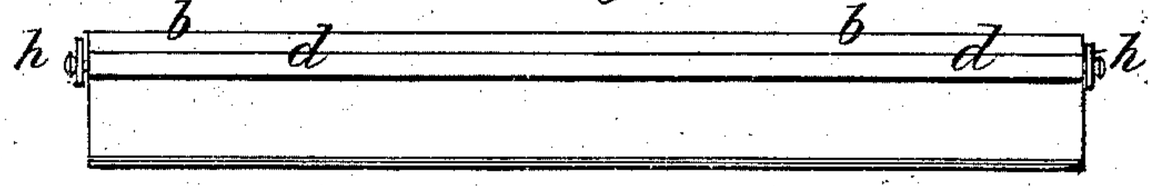


Fig: 5.

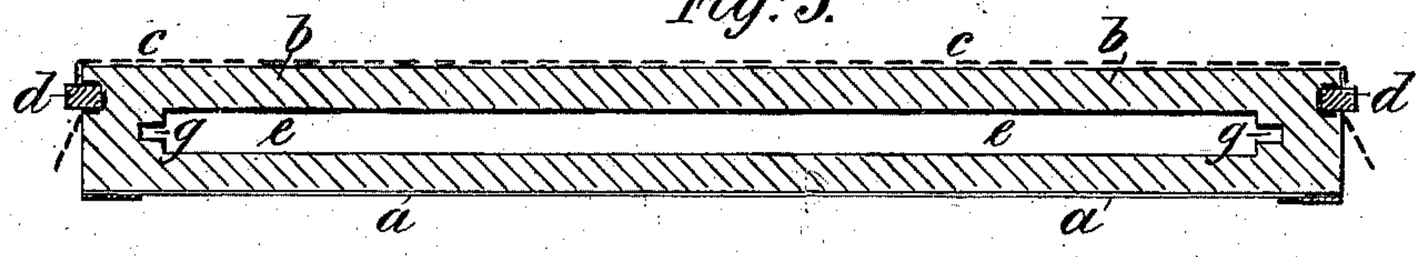


Fig: 6.

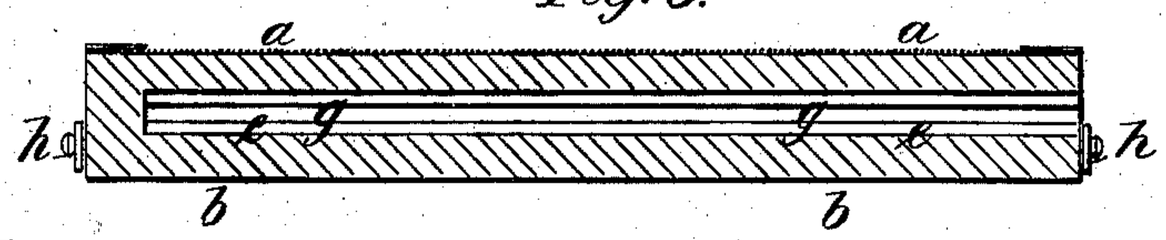


Fig: 7.

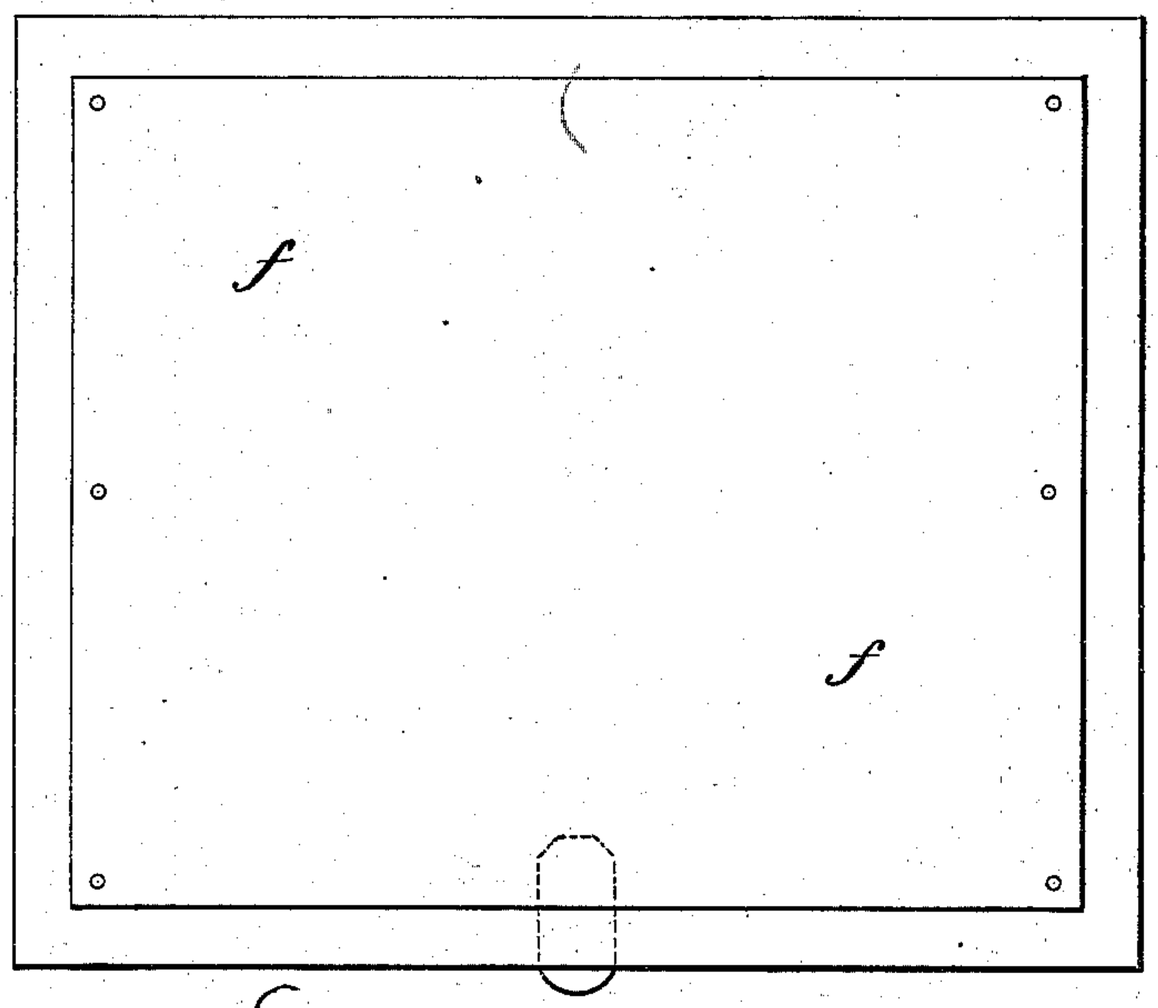
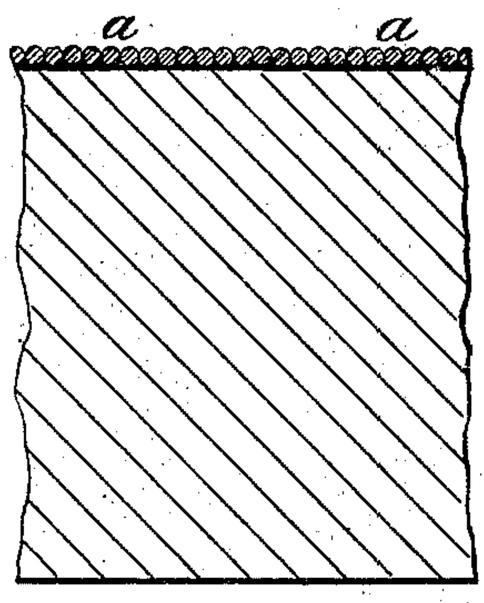


Fig: 8.



Attest

L. M. Hopkins

Geo. T. Smallwood Jr.

Inventor

David Gestetner

By Knight Bros

Attys.

UNITED STATES PATENT OFFICE.

DAVID GESTETNER, OF SOUTH KENSINGTON, COUNTY OF MIDDLESEX, ENGLAND.

APPARATUS FOR PRODUCING COPIES OF WRITINGS.

SPECIFICATION forming part of Letters Patent No. 242,919, dated June 14, 1881.

Application filed January 31, 1881. (No model.) Patented in England July 3, 1880.

To all whom it may concern:

Be it known that I, DAVID GESTETNER, a subject of the King of Hungary, residing at South Street, Thurloe Square, South Kensington, in the county of Middlesex, England, have invented certain new and useful Improvements in Means and Apparatus Employed in Producing Copies of Writings, Drawings, and other Delineations, (for which I have received Letters Patent in England, No. 2,725, dated 3d July, 1880,) of which the following is a specification.

The invention has for its object improvements in means and apparatus employed in producing copies of writings, drawings, and other delineations; and it relates to that class of apparatus in which a paper stencil is produced by writing with a style on paper laid on a roughened plate.

According to my invention I form the plate of a number of fine wires laid closely side by side and mounted on a board or plate, on which they are cemented by the aid of any suitable cement. This wire surface is, according to my invention, fixed on one side of a frame, the other side of which is employed for the printing-bed, while such frame is also formed with a space to receive the inking-plate, and with grooves at the ends to receive rods or bars, to enable the paper stencil to be stretched over the frame to produce the copies.

In order that my said invention may be more clearly understood and readily carried into effect, I will proceed, aided by the accompanying drawings, more fully to describe the same.

In the drawings, Figures 1 and 2 are plans of two opposite sides. Fig. 3 is a view of the front edge. Fig. 4 is a view of one of the side edges. Fig. 5 is a longitudinal section, and Fig. 6 is a cross-section, of my improved apparatus. Fig. 7 is a plan of the inking-plate separately, and Fig. 8 is an enlarged section of a portion of the frame and of my new wire surface fixed thereto.

a is the surface on which waxed paper is laid to produce the stencil by writing thereon with a style. *b* is the surface on which the printing is effected, the stencil *c* being stretched thereon and retained in such position by means of the straining rods or bars *d;* and *e* is a space in the center of the apparatus to receive the inking-plate *f* when the latter is not required for use, such inking-plate being held in a central position in such space *e* by running in grooves *g*.

The straining rods or bars *d* are capable of being readily locked in position and unlocked by means of hooks *h*. Other means may, however, be employed for this purpose.

The surface *a* is, according to my invention, formed of a number of fine wires laid closely side by side, and the method I prefer to employ in carrying this part of my invention into effect is as follows: I first obtain a cylinder of suitable diameter, and formed with a longitudinal groove or recess along its surface from end to end thereof. I then wind the wire around the same, taking care to lay each coil quite close to its neighboring coils. When the cylinder is covered to the extent required I coat the wire with a cement, which I leave on a sufficient time to insure the wire adhering thereto, but which is of such a character as to remain pliable sufficiently long to enable the wire to be cut by running a pair of shears or other suitable cutter along the groove or recess in the cylinder, and then to be removed from the cylinder and cemented onto any suitable surface.

Having thus described the nature of my said invention and the mode in which I carry the same into effect, I would have it understood that what I claim is—

1. The mode of producing surfaces for stenciling apparatus herein described, which consists in taking a cylinder of suitable diameter and formed with a longitudinal groove, winding wire around the same, coating the wire with cement, cutting the wire in line with the groove, removing the wire, and then mounting it on a suitable backing, as set forth.

2. A stenciling apparatus having a closely-laid surface of wire secured to a suitable backing.

3. In a stenciling apparatus, the frame having a wire surface on one side, a straining and printing bed on the other, and a space in the center adapted to receive the ink-plate, as set forth.

4. A stenciling apparatus consisting of a frame formed with a central space, *e*, having grooves *g*, for an ink-plate, *f*, a wire surface, *a*, cemented thereto, a printing-surface, *b*, and straining-rods *d*, as set forth.

DAVID GESTETNER.

Witnesses:
B. J. B. MILLS,
C. M. WHITE.