

E. de ZUCCATO.
 Apparatus for Producing Copies of Writings, &c.
 No. 211,877. Patented Feb. 4, 1879.

Fig. 2.

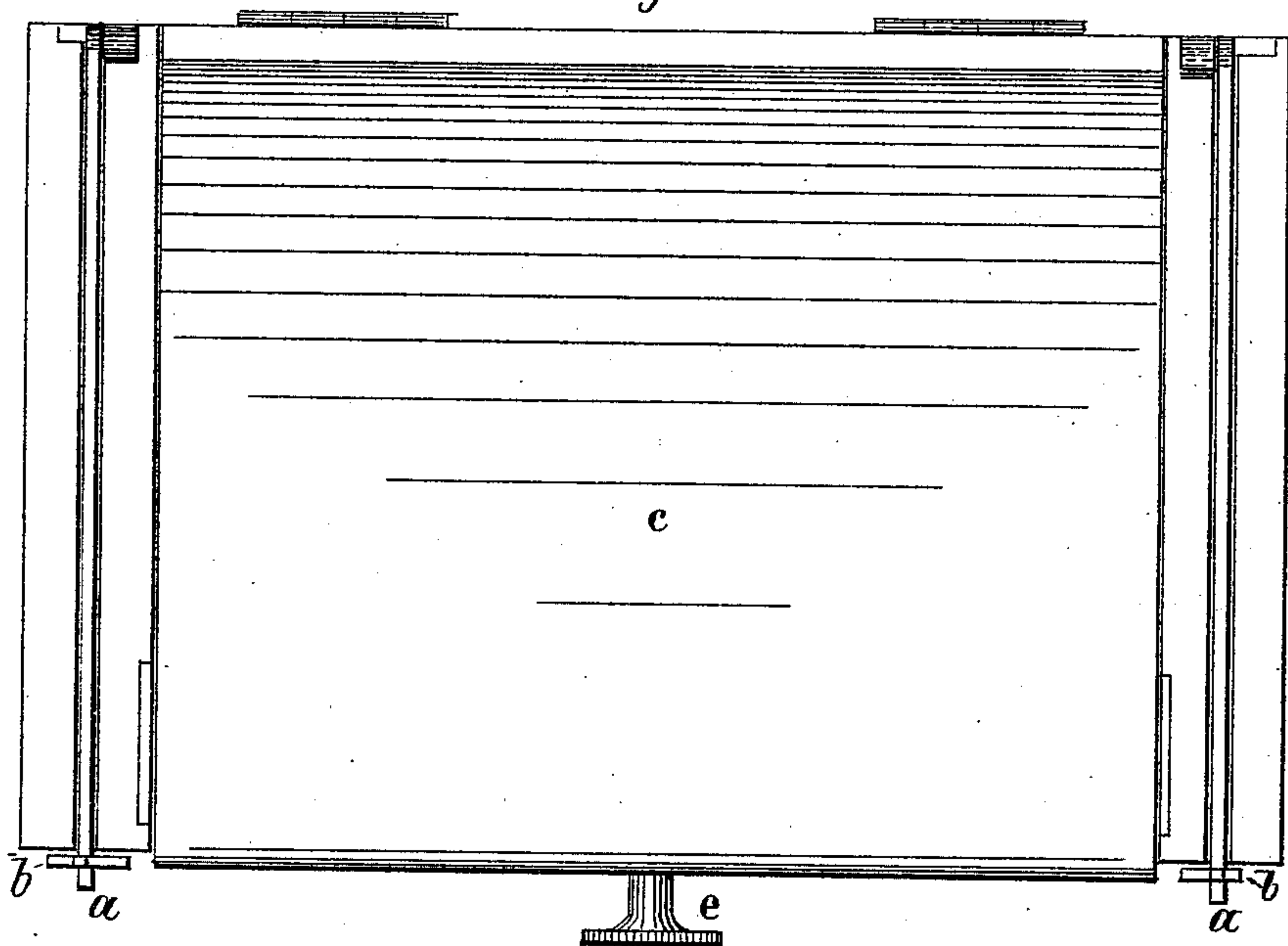
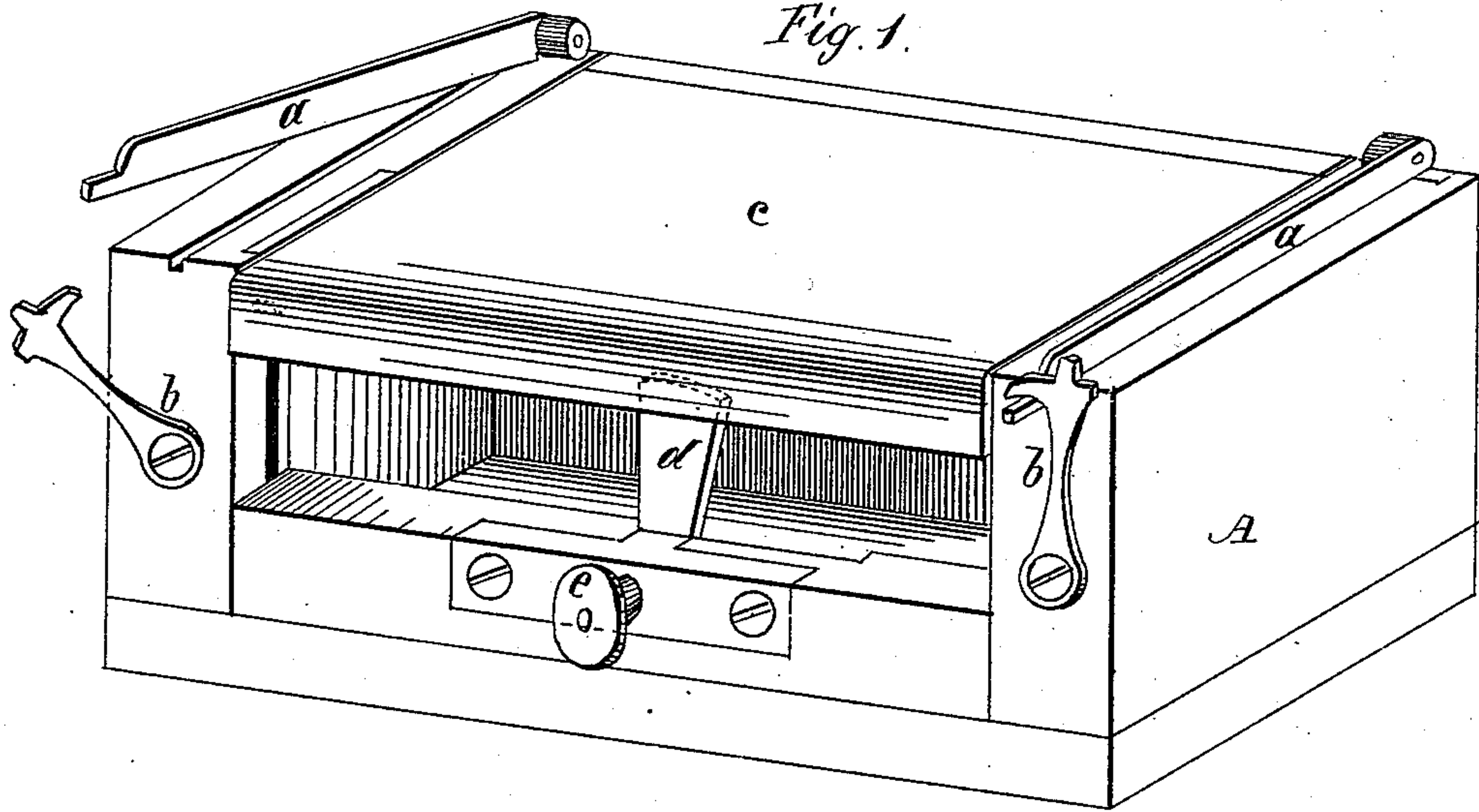


Fig. 1.



Witnesses.
Edw. L. Leonard
Henri Guillaume

Inventor
Eugenio De Zuccato
per Henry Orth
attly.

UNITED STATES PATENT OFFICE.

EUGENIO DE ZUCCATO, OF LONDON, ENGLAND.

IMPROVEMENT IN APPARATUS FOR PRODUCING COPIES OF WRITINGS, &c.

Specification forming part of Letters Patent No. **211,877**, dated February 4, 1879; application filed May 18, 1878; patented in England, September 29, 1877.

To all whom it may concern:

Be it known that I, EUGENIO DE ZUCCATO, of Charterhouse street, London, England, a subject of the Queen of Great Britain, have invented or discovered new and useful Improvements in Apparatus for Producing Copies of Writings, Drawings, and Delineations; and I, the said EUGENIO DE ZUCCATO, do hereby declare the nature of the said invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof—that is to say:

My invention of improvements in producing copies of writings, drawings, or other delineations relates to an improved apparatus for obtaining copies of writings, drawings, or other delineations from stencils.

There are several well-known modes for producing suitable stencils, by means of which a number of copies of writings, drawings, or other delineations may be obtained. Such stencils may be made from sheets of paper, which may be impermeable and water-proof, or even ordinary paper, without any preparation.

Paper stencils may be obtained either by chemical or by mechanical action.

The object in making a paper stencil is to produce in the sheet of paper the writing, drawing, or other delineation of which a number of copies are required, by means of holes or cuts, or by destroying the waterproofing of the paper if the paper is impermeable, so as to be able to pass through the holes or cuts, or through those portions of the sheet of paper where the waterproofing has been destroyed, an ink or a color, which, being caused to be deposited upon a sheet of paper or any other suitable material, represents the writing, drawing, or delineation of the stencil.

To obtain a large number of copies from a paper stencil, it is necessary that it should be handled with the greatest care; hence the advantage of my new apparatus, hereinafter described, and represented by Figures 1 and 2, its object being also to afford facility in placing

fresh sheets of paper under the stencil during the operation of producing copies or printing.

a a are two metallic bars or rods, hinged at the back of the apparatus. They can be raised or lowered, and they fit into two corresponding grooves in the ends of frame A. They may be kept tightly down when resting in their respective grooves by means of the two hooks *b b*.

The upper portion, *c*, of the apparatus, which lies between the grooved ends of the frame A, being hinged at the back, may be inclined or raised by means of the lever *d*, which is worked by the handle *e*, placed in front of the apparatus.

The use of the apparatus hereinbefore described is as follows: The two bars *a a* are lifted up, and the two opposite ends of the stencil properly stretched are placed underneath them; then the bars are lowered and secured by the hooks, the ends of the stencil being held tightly by the bars pressing them in their respective grooves.

The top of the apparatus, *c*, is inclined, by means of the handle *e*, and a sheet of paper is placed upon it. The top is again raised with the same handle to its proper position, together with the sheet of paper, which is then brought into contact with the under surface of the stencil.

During the operation of raising and lowering top or bed plate, *c*, the stencil has remained always stretched, firmly held by the two bars *a a*. Then, to produce a copy upon the paper placed underneath the stencil, a little ink or a color of a suitable quality is evenly spread upon the face of the stencil by suitable means, and is made to pass through the holes or cuts of the stencil, or through those portions of the stencil where the waterproofing has been destroyed, causing the ink or color to be deposited upon the sheet of paper placed under the stencil.

A like result is obtained when a fresh sheet of paper or any other suitable material is placed under the stencil, and suitable ink or

color used in the manner hereinbefore described.

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

In a printing apparatus, a frame or desk, A, provided with grooves on opposite ends, the hinged clamps *a*, the locking-latches *b*, the hinged frame, bed, or table *c*, the locking-lever

d, and milled knob or handle *e*, all combined, arranged, and operating substantially as described, for the purpose specified.

EUG. DE ZUCCATO.

Witnesses:

CHARLES BARLOW,

WILLIAM C. BATTEN,

23 Southampton Buildings, London.