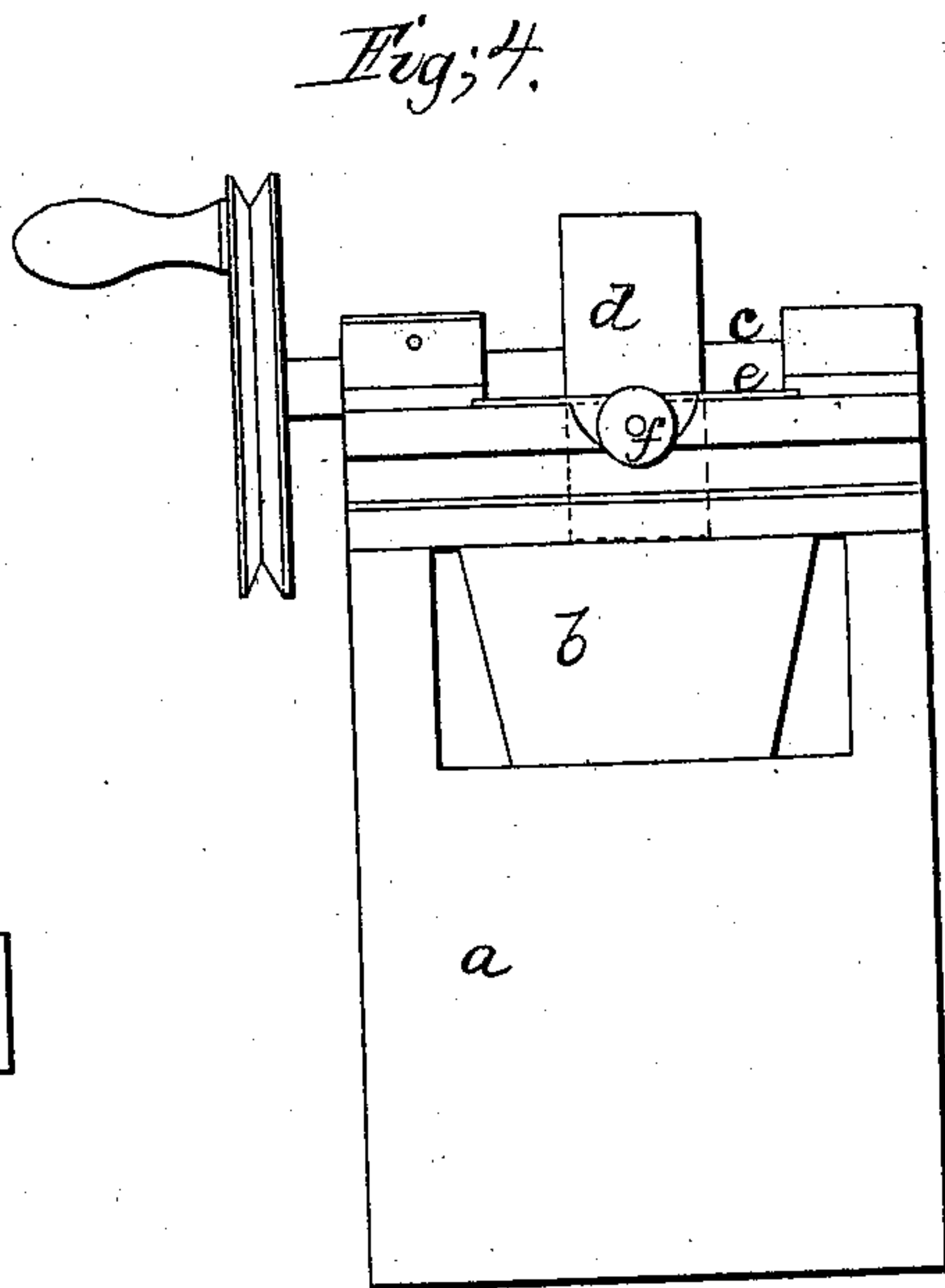
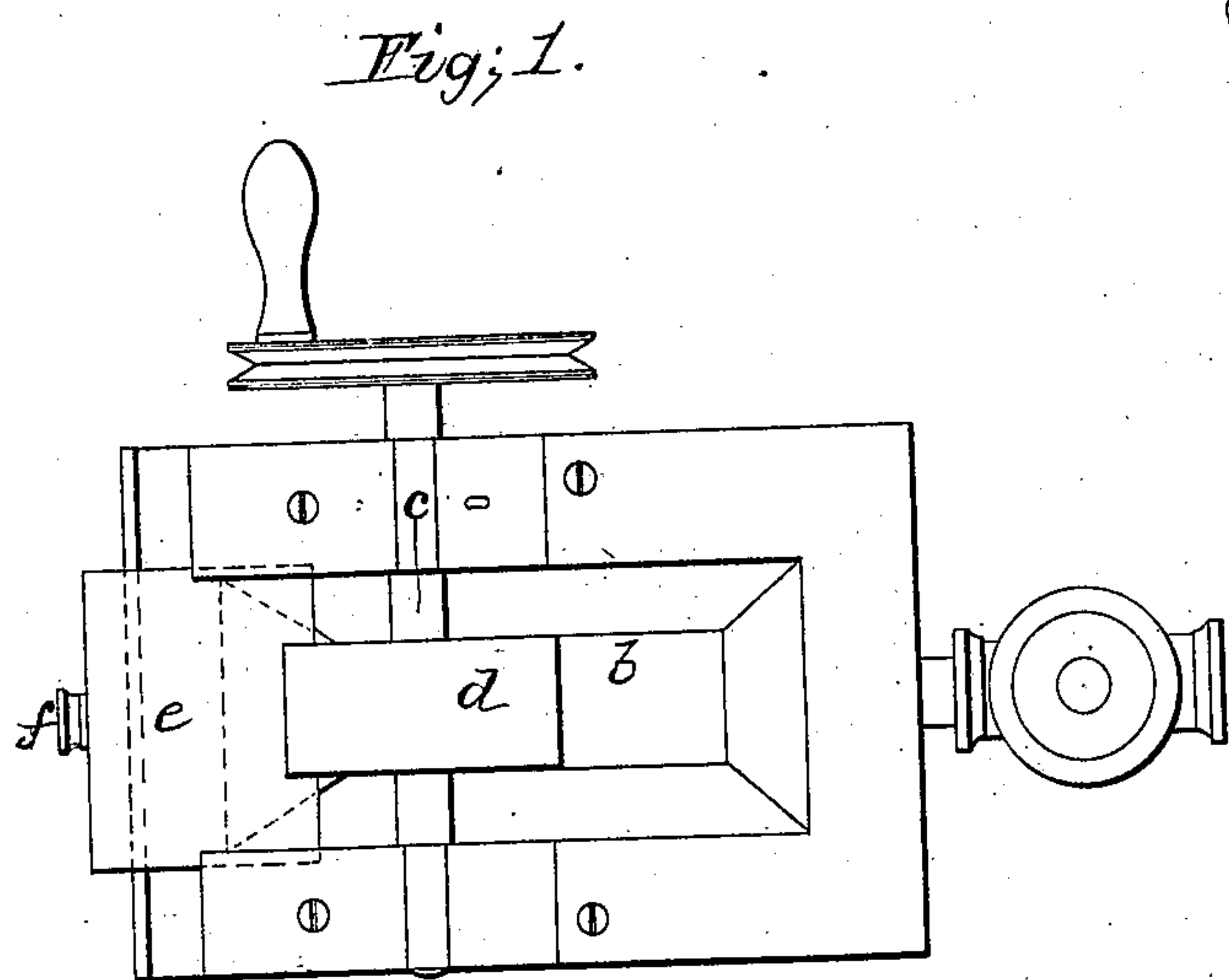
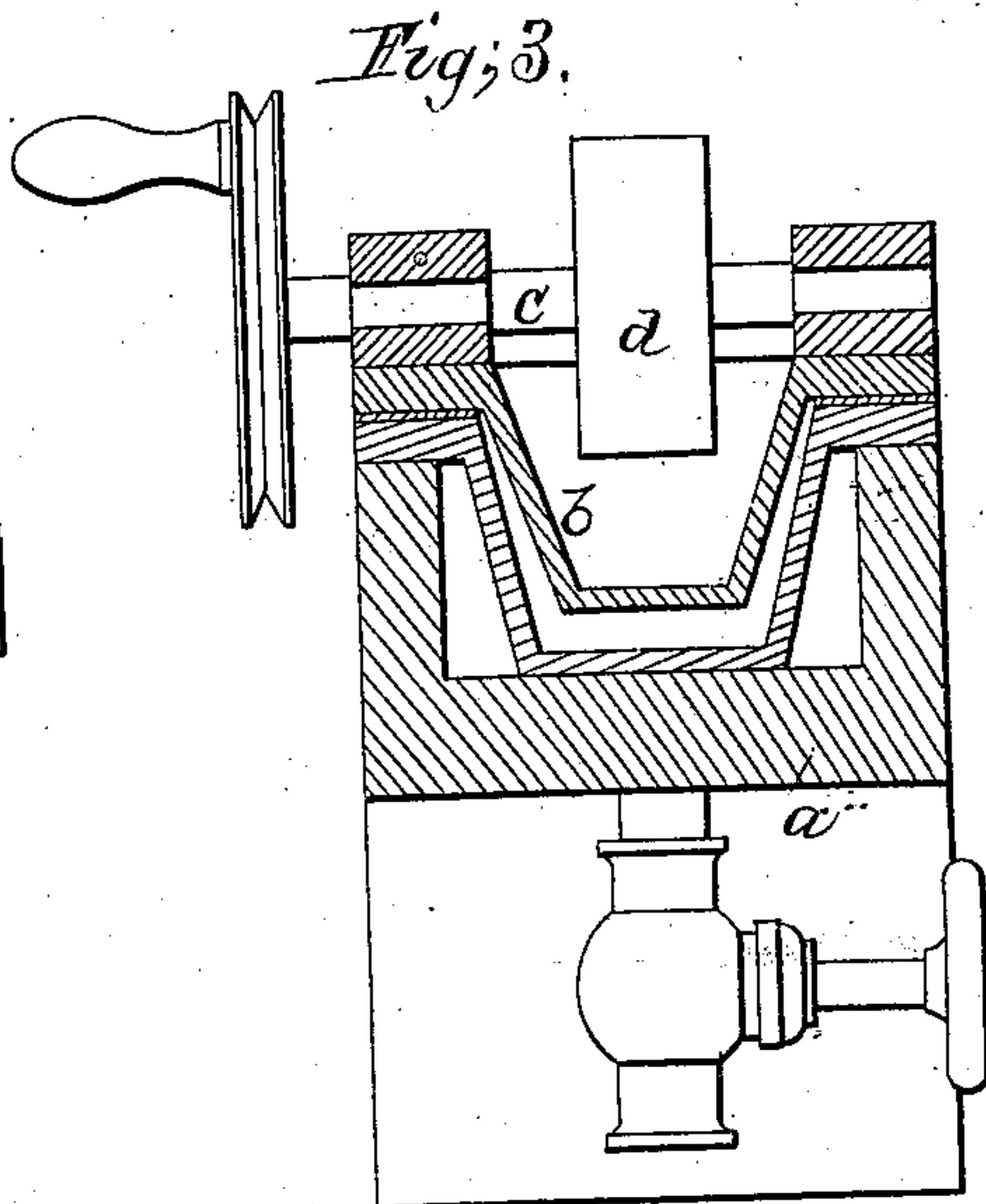
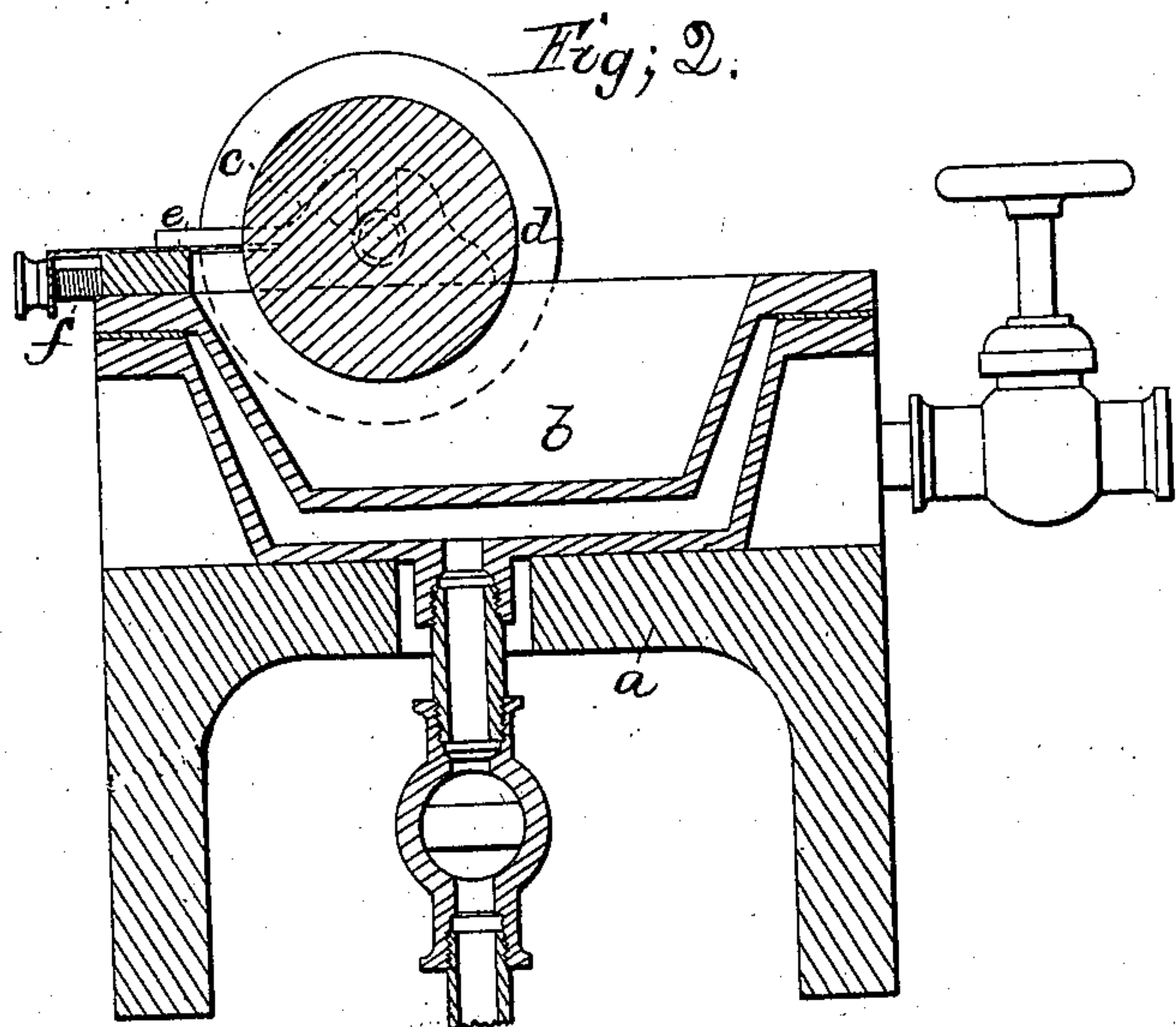


Merriam & Norton,

Leather Machine.

Patented June 5, 1866.

N^o 55,335.



Witnesses;
Francis Lovel
L. W. Hilder

Inventors;
M. H. Merriam
& L. Norton
by themselves

UNITED STATES PATENT OFFICE.

M. H. MERRIAM AND E. L. NORTON, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVED GLUING AND CEMENTING MACHINE.

Specification forming part of Letters Patent No. 55,335, dated June 5, 1866.

To all whom it may concern:

Be it known that we, M. H. MERRIAM and E. L. NORTON, both of Charlestown, in the county of Middlesex and State of Massachusetts, have invented an Improved Machine for Cementing or Gluing Shoe-Binding Strips; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

The invention relates to that one of the series of operations by which we convert skins of leather into shoe-binding ribbon in which the strips of leather are cemented together, one to the end of another, to form the ribbon.

More particularly this invention relates to the preparation and distribution of the cement in such manner that it shall be exposed in a continuous and graduated fresh surface, to be applied by the operator to the end of the strip by simply wiping such end over the surface, obtaining just and only sufficient cement by the manipulation to cause proper adhesion of the united surfaces.

The invention consists in combining a vat for holding glue or other cement with a cylinder rotating in such vat (its lower surface being immersed in the cement) and a scraper which removes the redundant cement from the surface of the cylinder, leaving a thin pellicle or surface of cement upon the cylinder, a portion of which sufficient for uniting the strips may be removed by passing the end of the strip across and in contact with the rotating cylinder and a continuously-fresh and properly-prepared surface being always before the operator, in consequence of the rotation of the roll in the glue and the action of the scraper.

The drawings represent a machine embodying the invention, Figure 1 showing a plan, Fig. 2 a central vertical and longitudinal section, Fig. 3 a central vertical and cross section, and Fig. 4 an end elevation, of the same.

a denotes a table or frame supporting a vat, *b*, the cement in which may be heated by steam passing around the sides and bottom of the same, or by any other suitable means. Mounted in bearings on the frame *a* is a shaft, *c*, carry-

ing a cylinder, *d*, the shaft with its cylinder being rotated by any suitable power. The lower part of the cylinder extends down into the cement contained in the vat. Upon one end of the vat is placed a scraper, *e*, the inner edge of which is nearly in contact with the surface of the cylinder, and is moved up toward or away from such surface by an adjusting screw, *f*.

The cement being brought by heat or other preparation to a suitable consistency, rotation is given to the cylinder, the scraper being adjusted to remove the redundant cement raised upon the surface of the cylinder. This being accomplished, the operator takes a strip of leather and wipes the end across the surface of cement, obtaining upon it the proper quantity of cement so disposed as to impart the adhesiveness necessary to unite the strip to another, the rotation of the cylinder immediately exposing a fresh surface of cement.

By this means it will be obvious that a perfectly uniform result may be attained in uniting successive strips, there being always a fresh surface of cement so graduated in thickness as to obviate any liability of obtaining a superfluity of cement upon the strip.

When the cement is applied to the strip it is removed to a press, under which another strip is already laid, and the cemented end is laid upon the end in the press, after which a platen is brought down upon them to hold them together until the cement is set, a series of presses being used so that the operation of cementing may be carried on without stopping for the setting of the cement upon each strip.

We claim—

The combination of the cement-containing vat, the rotating cement-cylinder, and the scraper, operating together in the manner and for the purpose substantially as set forth.

In witness whereof we have hereunto set our hands this 24th day of November, A. D. 1865.

M. H. MERRIAM.
E. L. NORTON.

Witnesses:

J. B. CROSBY,
F. GOULD.