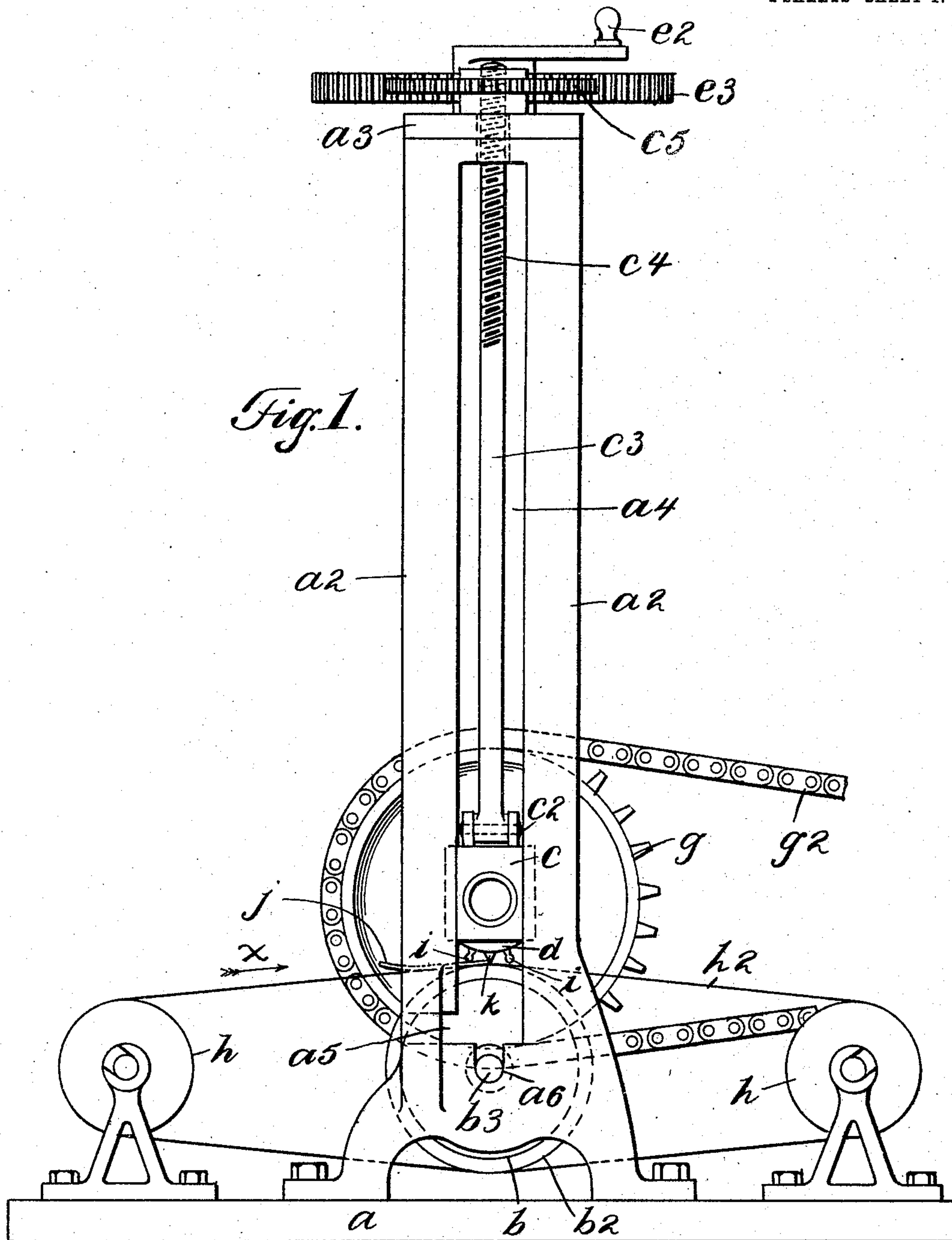


No. 782,516.

PATENTED FEB. 14, 1905.

A. NICOLLET.  
EMBOSSING MACHINE.  
APPLICATION FILED MAR. 21, 1904.

2 SHEETS—SHEET 1.



WITNESSES

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INVENTOR

BY *Auguste Nicolle*  
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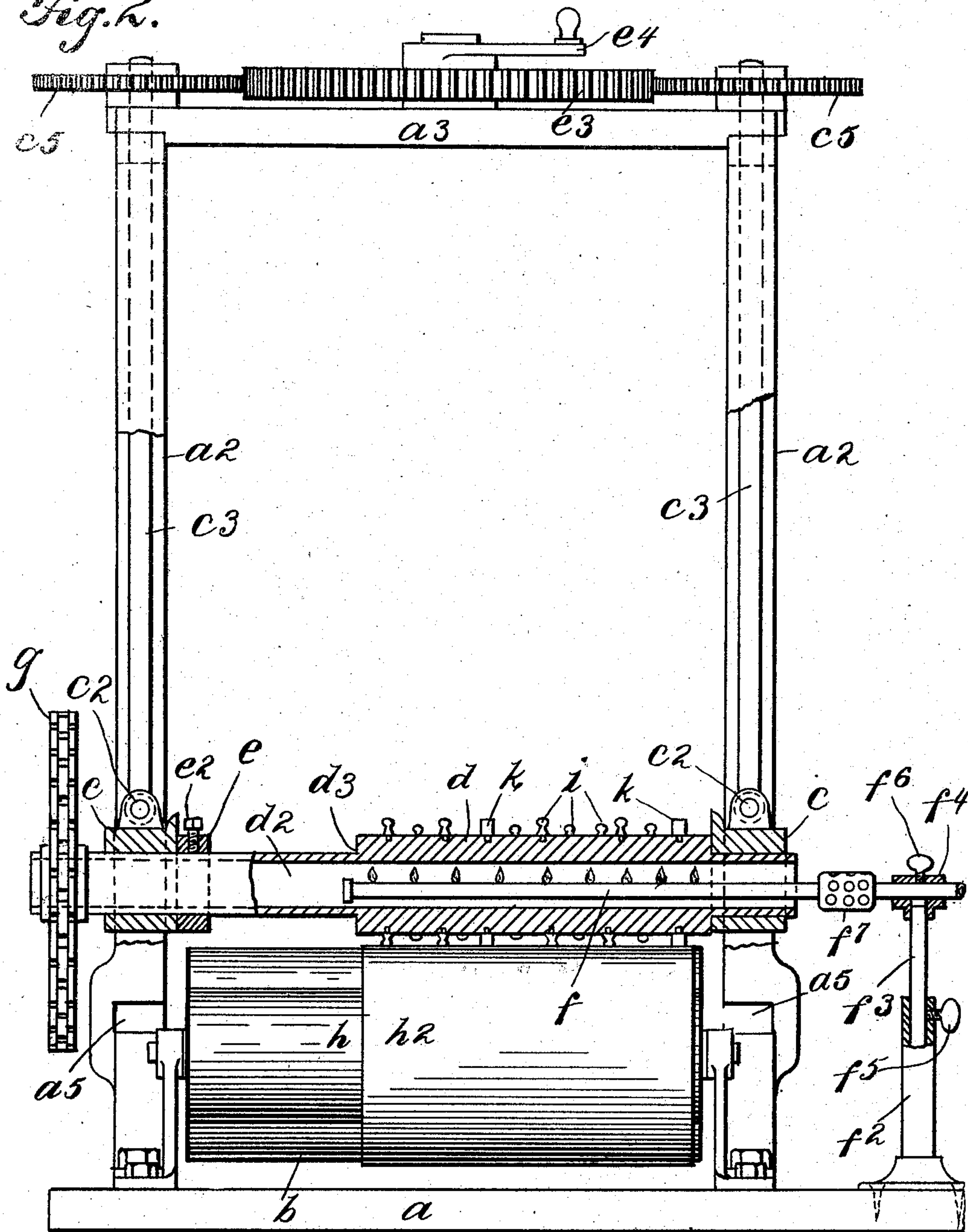
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2 SHEETS—SHEET 2.

*Fig. 2.*



WITNESSES

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## UNITED STATES PATENT OFFICE.

AUGUSTE NICOLLET, OF NEW YORK, N. Y.

## EMBOSSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 782,516, dated February 14, 1905.

Application filed March 21, 1904. Serial No. 199,159.

*To all whom it may concern:*

Be it known that I, AUGUSTE NICOLLET, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Embossing-Machines, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved machine for embossing leather, paper, and other material in the manufacture of flowers and decorative articles; and with this and other objects in view the invention consists in a machine of the class specified constructed as hereinafter described and claimed.

This is an improvement on that described and claimed in an application for Letters Patent of the United States filed by me October 6, 1903, Serial No. 175,931, and is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, in which—

Figure 1 is an end view of my improved embossing-machine, and Fig. 2 a sectional side elevation thereof.

In the practice of my invention I provide a main frame which is preferably composed of a base  $a$  and upright members  $a^2$ , which are connected at the top thereof by a cross-plate or bar  $a^3$  and in the bottom portion of which is mounted an impression-roller  $b$ , provided with a thick covering  $b^2$ , of soft rubber or similar material. The upright frame members  $a^2$  of the main frame are provided with vertical slots or openings  $a^4$ , the bottoms of which, as shown at  $a^6$ , are formed into bearings to receive the ends of the shaft or the journals of the roller  $b$ , and the slots or openings  $a^4$  are also provided at one side with laterally-directed openings  $a^5$ , so that the roller  $b$  may be removed laterally from the main frame or inserted into the main frame whenever desired. Mounted in and vertically movable in the slots or openings  $a^4$  are bearing-boxes  $c$ , which support a vertically-movable form-roller  $d$ , and said form-roller is tubular in form or provided with a central bore or passage  $d^2$  and is also reduced at one end,

as shown in  $d^3$ , in order that it may be moved longitudinally through the corresponding bearing-box  $c$ , and mounted on the reduced portion of the form-roller is a collar  $e$ , having a set-screw  $e^2$ .

Pivotaly connected with each of the bearing-boxes  $c$  or hinged thereto in any desired manner, as shown at  $c^2$ , is a rod  $c^3$ , and these rods  $c^3$  pass upwardly through the slots or openings  $a^4$  in the upright frame members  $a^2$  and through the plate or bar  $a^3$  at the top of the main frame, and the upper ends thereof are screw-threaded, as shown at  $c^4$ , and each is provided at its upper end with a gear-wheel  $c^5$ , and the turning of the wheel  $c^5$  will raise and lower the rods  $c^3$ , according to the direction in which said wheels are turned. Mounted centrally of the top of the main frame is a large gear-wheel  $e^3$ , having a crank  $e^4$ , which meshes with the wheels  $c^5$ , and by turning the wheel  $e^3$  the rods  $c^3$  and the form-roller  $d$  may be raised or lowered, as will be readily understood. The object of this construction is to provide means whereby the form-roller  $d$  may be taken out and repaired or another substituted without taking the frame of the machine apart, and in order to accomplish this result all that is necessary is to raise the rods  $c^3$  and the roller  $d$  and loosen the collar  $e$  and move the form-roller  $d$  to the left, when the end of said roller opposite that with which the collar  $e$  is connected may be lifted out and said roller entirely removed from the main frame of the machine.

I also provide means for heating the form-roller  $d$ , and in the form of construction shown such means consist of a burner-tube  $f$ , adapted to be inserted into one end of said roller and supported by a tubular standard  $f^2$ , provided with a vertically-adjustable support  $f^3$ , having a head member  $f^4$ , through which the burner-tube  $f$  is passed, and the support  $f^3$  may be adjusted vertically by means of a set-screw  $f^5$ , while the burner-tube  $f$  may be adjusted longitudinally by means of a set-screw  $f^6$ , and the said burner-tube is also provided with an air-inlet device  $f^7$  of any preferred construction, and by means of this form of heater the position of the burner-tube  $f$  may be adjusted vertically to correspond with the position of the form-roller  $d$ ,



and it may be removed longitudinally from said form-roller whenever necessary.

The reduced end portion of the form-roller  $d$  projects beyond the corresponding side of the main frame and is provided with a sprocket or similar drive wheel  $g$ , and in the form of construction shown an ordinary drive-chain  $g^2$  is mounted on this wheel and may be geared in connection with any suitable form of power device. Arranged at the front and back of the impression-roller  $b$  is a roller  $h$ , and passed over these rollers and over the impression-roller  $b$  is an endless belt  $h^2$ , the width of which in practice is preferably the same as the length of the operative portion of the form-roller  $d$ ; but said belt may be of any desired width, and the form-roller  $d$  is provided with a plurality of formers  $i$ , which may be connected therewith in any desired manner, and the form or shape or style of which will depend on the character of the work to be done. If leaves are to be made, the formers  $i$  will be shaped so as to form the impression or representation of a leaf, and if flowers or petals are to be formed the formers  $i$  will be correspondingly shaped. In Fig. 1 of the drawings I have shown at  $j$  a leaf which may be cut from any preferred material, such as is usually employed for this purpose, and in practice the form-roller  $d$  is provided with a plurality of teeth  $k$  or other feeders, which may be arranged on said roller in any desired manner, and the material to be embossed or ornamented, whether it be a leaf  $j$  or any other article or substance, is fed into the machine in the direction of the arrow  $x$  in Fig. 1, and one or more of the teeth  $k$  will catch and hold the same and feed it between the rollers  $b$  and  $d$ . It will be understood that the belt  $h^2$  is carried around the rollers  $b$  and  $h$  constantly in the operation of the machine, and the material to be embossed or ornamented is carried through the machine on said belt, and in this operation the formers  $i$  press upon the material and give it the desired shape or configuration, and in this operation both the material to be ornamented or embossed and the belt  $h^2$  are pressed downwardly onto the soft covering  $b^2$  of the roller  $b$ , and the material to be ornamented or embossed is crimped or pressed into the desired form, as will be readily understood, and a whole sheet of said material may be thus fed through the machine and afterward cut into the desired parts or sizes.

The endless belt  $h^2$  is preferably made very thin, but of comparatively strong material, so that the formers  $i$  will work properly in connection therewith, so as to give the desired imprint or form to the material to be embossed or ornamented.

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

1. In a machine of the class described, a main

frame, an impression-roller mounted in the bottom thereof, vertically-adjustable bearings in the opposite sides of the main frame over the impression-roller, a form-roller mounted in said bearings and one end of which is reduced in size and adapted to move longitudinally through its bearing, and a collar adapted to be secured to the reduced portion of said form-roller, said form-roller being tubular in form, and a burner-tube supported independently of the main frame and adapted to be adjusted longitudinally in said form-roller, substantially as shown and described.

2. In a machine of the class described, a main frame, an impression-roller mounted in the bottom thereof, vertically-adjustable bearings in the opposite sides of the main frame over the impression-roller, a form-roller mounted in said bearings and one end of which is reduced in size and adapted to move longitudinally through its bearing, and a collar adapted to be secured to the reduced portion of said form-roller, said form-roller being tubular in form, and a burner-tube supported independently of the main frame and adapted to be adjusted longitudinally in said form-roller, said burner-tube being also vertically adjustable, substantially as shown and described.

3. In a machine of the class described, a frame, an impression-roller mounted therein, an endless belt movable thereover, a form-roller mounted over the impression-roller and provided with vertically-adjustable end bearings, one end of said form-roller being reduced in size and adapted to move longitudinally through its bearing, a collar mounted on the reduced end of the form-roller and adjustable thereon, and means for driving the form-roller, substantially as shown and described.

4. In a machine of the class described, a frame, an impression-roller mounted in the bottom portion thereof, an endless belt movable over the impression-roller, a form-roller mounted over the impression-roller and provided with vertically-adjustable end bearings, one end of the form-roller being reduced in size and adapted to move longitudinally through its bearing, a collar mounted on and adjustable on the reduced end of the form-roller, and means for heating the form-roller, means for driving the form-roller, the frame having lateral openings through which the impression-roller may be removed, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 3d day of March, 1904.

AUGUSTE NICOLLET.

Witnesses:

C. J. KLEIN,

F. A. STEWART.