

ALBERT KOMP. Embossing Press.

No. 123,026.

Patented Jan. 23, 1872.

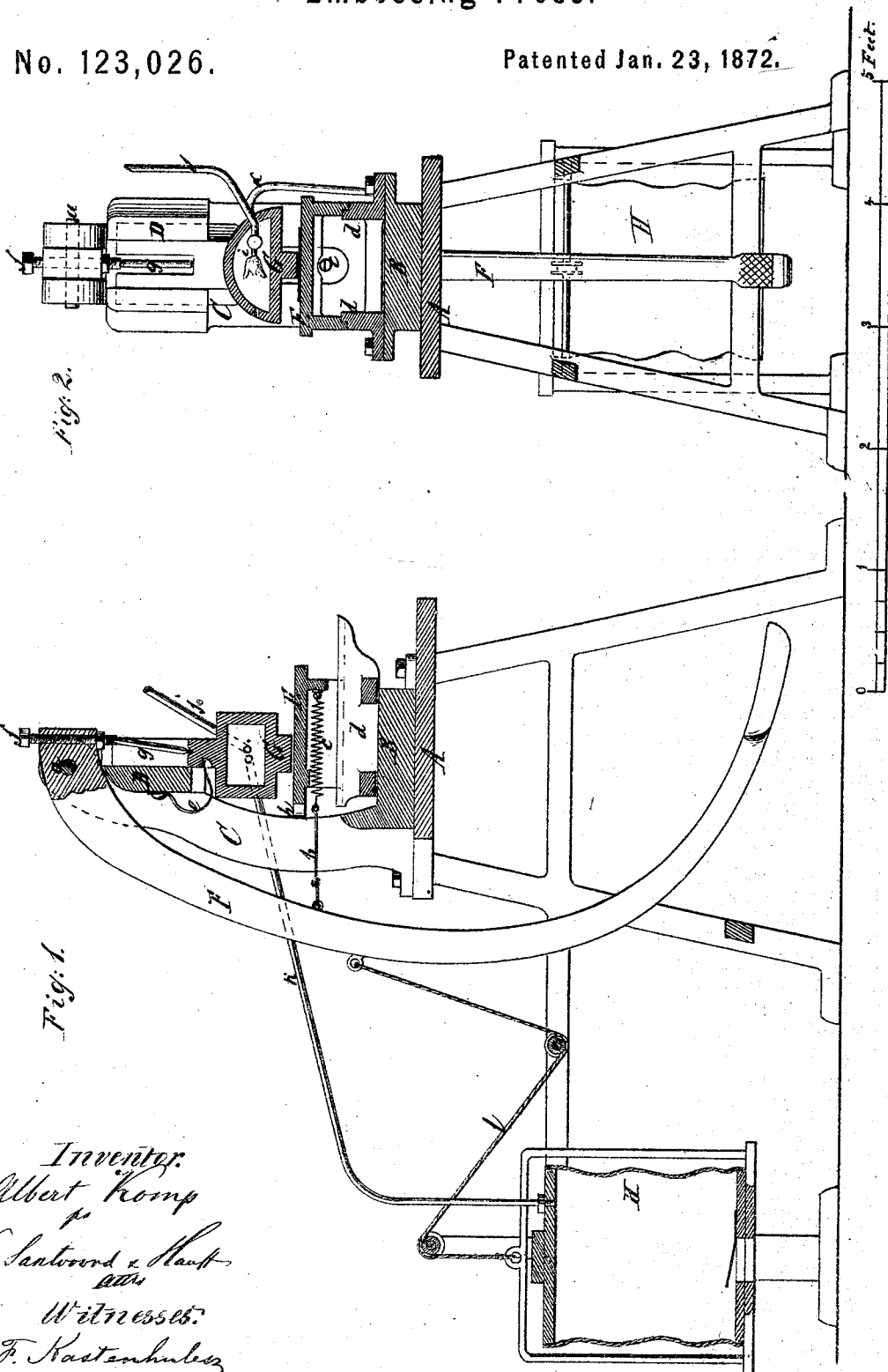


Fig. 2.

Fig. 1.

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ALBERT KOMP, OF NEW YORK, N. Y.

IMPROVEMENT IN EMBOSSING-PRESSES.

Specification forming part of Letters Patent No. 123,026, dated January 23, 1872.

To all whom it may concern:

Be it known that I, ALBERT KOMP, of the city, county, and State of New York, have invented a new and Improved Press for Embossing and Printing; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention. Fig. 2 is a transverse section of the same.

Similar letters indicate corresponding parts.

This invention relates to an improvement in embossing and printing-presses; and it consists of the combination of parts as will be hereinafter more fully set forth.

In the drawing, the letter A designates a frame or table which supports my press. This press consists, essentially, of a bed-plate, B, from which rises a standard, C, and which supports the guide-ways *d* of the platen E. The standard C forms the bearing for the fulcrum-pin *a* of a foot-lever, F, which extends down beneath the table A, so that it can be conveniently operated by a person standing in front of the press. Said foot-lever connects by a rod, *b*, with a spring, *c*, which is secured to the platen E, so that, by pressing the foot-lever back, the platen is moved into the position shown in Fig. 1, and by permitting the foot-lever to swing forward, the platen is returned to the forward ends of its guide-ways. Over the platen E is situated the die G, the shank of which fits into guide-ways D on the front of the standards C, and which is subjected to the action of a spring, *e*, that has a tendency to raise the die up clear of the platen. (See Fig. 1.) The downward motion of the die is effected by the action of the foot-lever F, in the upper end of which is secured a screw, *f*, with a hollow center to receive a rod, *g*, the lower end of which drops in a cavity in the shank of the die, the screw *f* and rod *g* being arranged in such relation to each other that they form a sort of toggle-joint, and that, by forcing the lever back, the screw is gradually

brought in line with the rod and the die is depressed with great power toward the platen. From this description it will be seen that both the die and the platen are moved by the same foot-lever; but in order to effect a correct impression, it is necessary that the platen shall stop while the impression is given. This is effected as follows: On the platen are formed stops, *h*, and when the foot-lever is forced back, these stops are brought up against the inner surface of the standard C, and the motion of the platen is thereby arrested. But as the spring *c* extends, the foot-lever is permitted to swing back still further after the platen stops, and the die is brought down upon the material placed upon the platen with the requisite force to produce a good impression. By means of the screw *f* the die can be readily brought in the correct position toward the platen. The body of the die G is hollow, and it is heated by means of a gas-jet, *i*, supplied with gas through a pipe, *j*. In order to insure combustion of the gas in the interior of the die, and to produce an intense heat, the gas is mixed with atmospheric air in the die itself by means of a pipe, *k*, which connects with a bellows or other suitable air-forcing or blowing apparatus, H. This blowing apparatus connects by a rope, *l*, or otherwise, with the foot-lever F, so that by the action of the foot-lever the requisite supply of air is produced. If desired, the gas-jet, instead of being situated in the interior of the die, might be arranged on the outside thereof, and, by the current of air injected through the pipe *k*, the flame would be made to impinge against the die like a flame acted on by a blow-pipe, and thereby the temperature of the die could soon be raised to the desired point. By inclosing the gas-jet in the hollow die, however, no heat is wasted, and a very small supply of gas is sufficient to keep the die heated to the desired point.

By this press the operation of embossing or printing is materially facilitated, all the working parts of the press being operated by the foot-lever F, so that the workman has both hands free to introduce, adjust, and remove the material to be embossed, and at the same time the foot-lever F can be made of such

length that comparatively little effort is required to produce the power required for the successful operation of the press.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the reciprocating-platen E, rising-and-falling die G, toggle-joint *f g*, air-blast H, gas-jet *i*, and pendulum-lever F, all arranged and operating substantially as and for the purpose set forth.

2. The air-blowing apparatus H, in combination with the foot-lever F and gas-jet *i*, acting on the die G, substantially as shown and described.

This specification signed by me this 21st day of September, 1871.

A. KOMP.

Witnesses:

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