

(No Model.)

E. M. VAIL & G. POTTER.
MACHINE FOR MARKING MAIL MATTER.

No. 560,446.

Patented May 19, 1896.

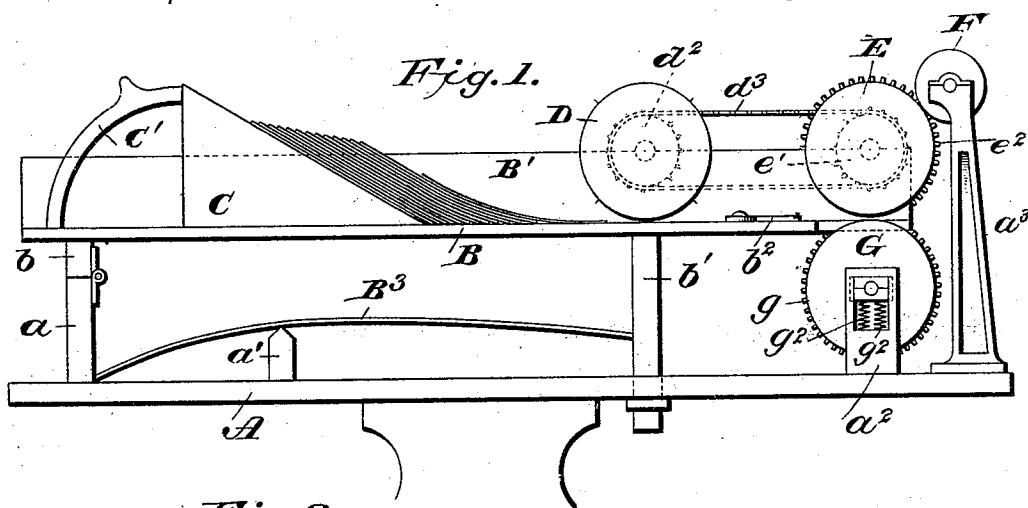
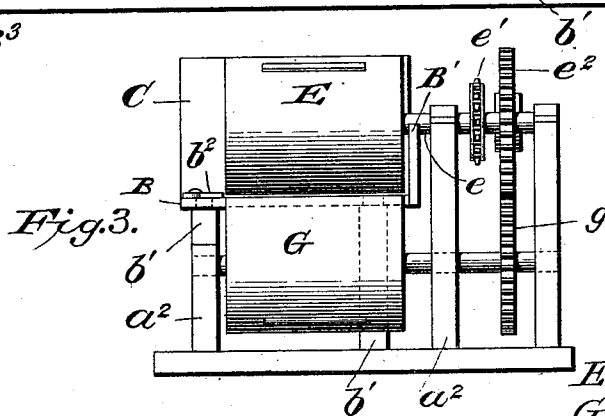
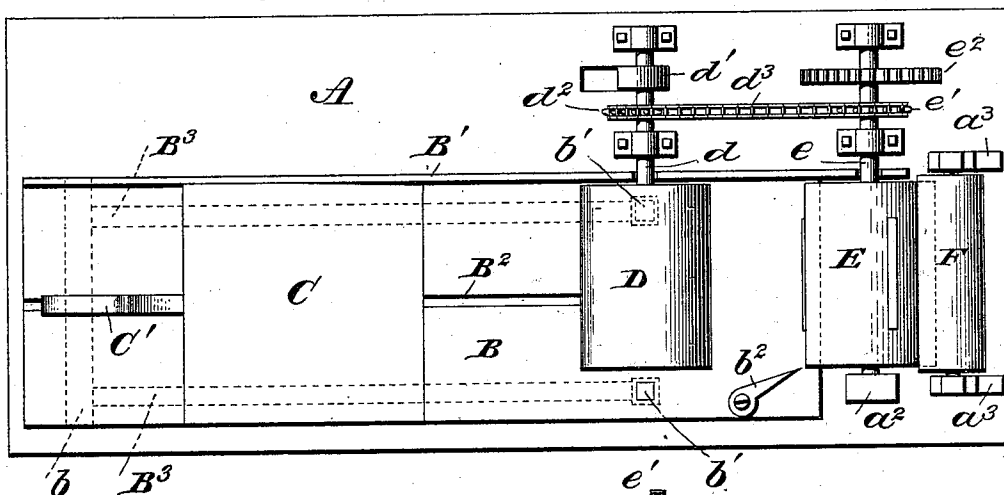


Fig. 2.



Edward M. Vail
Gideon Potter
INVENTORS

WITNESSES

WITNESSES
L. S. Elliott.

E. W. Johnson

by *[Signature]*

Attorney.

UNITED STATES PATENT OFFICE.

EDWARD M. VAIL AND GIDEON POTTER, OF KEWANEE, ILLINOIS.

MACHINE FOR MARKING MAIL-MATTER.

SPECIFICATION forming part of Letters Patent No. 560,446, dated May 19, 1896.

Application filed August 22, 1895. Serial No. 560,124. (No model.)

To all whom it may concern:

Be it known that we, EDWARD M. VAIL and GIDEON POTTER, citizens of the United States of America, residing at Kewanee, in the county of Henry and State of Illinois, have invented certain new and useful Improvements in Machines for Marking Mail-Matter; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a machine that will expedite the work of marking mail-matter; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a machine for marking mail-matter constructed in accordance with our invention. Fig. 2 is a plan view, and Fig. 3 an end elevation.

A designates the bed-plate of the machine, which is provided with posts or uprights *a*, upwardly-projecting fulcrums *a'*, bearing-blocks *a''*, and uprights or posts *a'''*, the bed-plate being also provided with apertures through which pass the guide-bars for the movable end of the table, as hereinafter described.

B designates the table, which is provided on one side with an upwardly-projecting flange *B'* and is connected at one end to the posts *a* by hinges which are attached to said posts and to a cross-piece *b* on the under side of the table. Near the free end of the table are secured depending bars *b'*, which pass through apertures therefor in the bed-plate A, the ends of said guide-bars being provided with collars for limiting the upward movement of the table, and the table is normally held to the limit of its upward movement by flat springs *B''*, which are fulcrumed on the short posts *a'* and attached to the bed-plate and to the guide-bars. The upper side of the table is provided with a longitudinal groove *B''*, the edges of which are preferably undercut, and

with this groove engages a tongue depending from a mail carrier or block C, having an inclined face and an operating-handle *C'*.

D designates the feeding-cylinder, which is supported above the free end of the table by its shaft *d*, which is journaled in bearings carried by uprights which project from the bed-plate and are located beyond that side of the table upon which the flange *B'* is formed. The shaft *d* carries a pulley *d'*, over which the driving-belt passes, and is also provided with a sprocket-wheel *d''*, from which the other parts of the machine are driven.

E designates the printing or type-carrying roll, which is supported in position a slight distance beyond the free end of the table by means of its shaft *e*, which is journaled in bearings in a manner similar to the shaft of the feeding-cylinder. The printing roll or cylinder is driven by a chain *d'''*, which extends from the sprocket-wheel *d''* and passes over a sprocket-wheel *e'* on the shaft *e*. The shaft *e* is also provided with a gear-wheel *e''*, which meshes with a gear-wheel *g* on the shaft of an impression-cylinder G, said impression-cylinder being located below the printing-roll and the shaft thereof journaled in bearings, which are vertically movable in their supports *a''*, the bearings being normally held to the limit of their upward movement by helical springs *g''*, as shown in Fig. 1. This arrangement provides for a vertical movement of the impression-cylinder, so that letters or packages of different sizes may pass between the impression and printing cylinders.

The printing-cylinder E is provided with type-bars or printing-surfaces, which project therefrom and are inked by an inking-roller F, journaled in the upper ends of the uprights *a'''*. The inking-roller may be supplied with ink in the usual manner. The impression-cylinder is provided with recesses, which receive the printing surfaces or type of the printing-roll, so that at no time will the printing surfaces or type come in contact with the impression-cylinder, and the two cylinders being geared to each other, as hereinbefore described, will insure the registering of the type with the recesses. The teeth of the gear-wheels *e''* and *g* may be so cut as to provide for the slight vertical movement of the platen-roll.

On the upper side of the table B, near the free end thereof, is located a plate or guide b^2 , which acts to guide the letters or mail-matter to the printing and platen rolls.

5 Beyond the impression-cylinder, between the posts a^3 , may be placed a suitable receptacle, in which the mail-matter will be deposited.

10 In operation the mail-matter or letters are stacked and placed against the inclined surface of the block C, which is then moved toward the feeding-cylinder, the feeding-cylinder taking the letters one at a time and feeding them to the printing roll or cylinder, by
15 which they are dated and the stamp canceled, the letters passing from between the printing and impression cylinders to a suitable receptacle. If a letter or package of more than
20 usual thickness is caught by the feeding-roll, the table will give, so as to allow it to be fed to the printing-roll, and the impression-cylinder will be depressed, so as to permit it to pass beneath said printing-roll.

25 This machine is simple in construction and a skilled operator can mark mail-matter more rapidly than by the use of the ordinary hand-stamps.

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

30 1. In a machine for marking mail-matter, the combination with a suitable bed-plate or frame, of a vertically-movable table having on one side an upwardly-projecting flange
35 and centrally a longitudinal groove; a sliding block mounted on the table and provided with an inclined face and a depending tongue in engagement with the longitudinal groove; together with the feeding and printing cylinders
40 located above the plane of the table, the shafts of said cylinders being supported in bearings located beyond that side of the table upon which the flange is formed, substantially as shown and described.

45 2. In a machine for marking mail-matter, the combination with a suitable base or frame, of a vertically-movable table having on one side an upwardly-projecting flange and cen-

trally a longitudinal groove; a sliding block mounted on the table and provided with an inclined face and with a depending tongue in engagement with the longitudinal groove; together with the feeding and printing cylinders located above the plane of the table, the shafts of the cylinders being supported in bearings positioned beyond that side of the table upon which the flange is formed, and an impression-cylinder vertically movable in its bearings, substantially as shown and for the purpose set forth.

3. In a machine for marking mail-matter, the combination, of a movable table, a block mounted thereon and provided with an inclined face, a feeding-cylinder suitably supported above the table, a printing roll or cylinder located a short distance beyond the end of the table, and an impression-cylinder mounted in movable bearings below the printing-cylinder, the cylinders being geared to each other, substantially as shown and described.

4. In a machine for marking mail-matter, the combination, of a bed-plate having posts a , fulcrum a' , bearing-blocks a^2 and up-rights a^3 , a table hinged to the posts a and having guide-bars b' with which flat springs carried by the bed-plate engage, the table having a longitudinal recess or groove in its upper surface, a letter-carrier or block having an inclined face and a depending tongue which engages the groove in the table, a feeding-cylinder mounted above the free end of the table, and printing and impression cylinders located one above the other beyond the movable end of the table, the rolls being geared to each other substantially as shown; together with an inking-roller mounted in the up-rights a^3 so as to engage the printing roll or cylinder.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD M. VAIL.
GIDEON POTTER.

Witnesses:

CHARLES L. ROWLEY,
R. GURNEY.