

E. A. KLABER.
LETTER COPYING APPARATUS.
APPLICATION FILED NOV. 14, 1911.

1,047,242.

Patented Dec. 17, 1912.

FIG. 1.

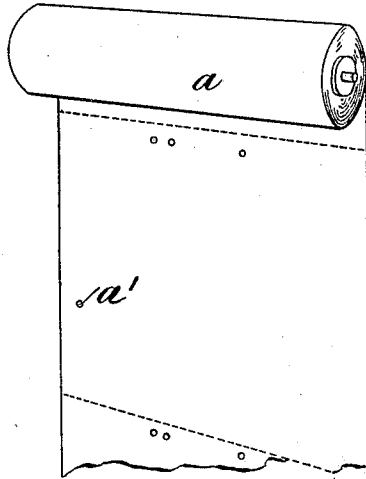


FIG. 2.

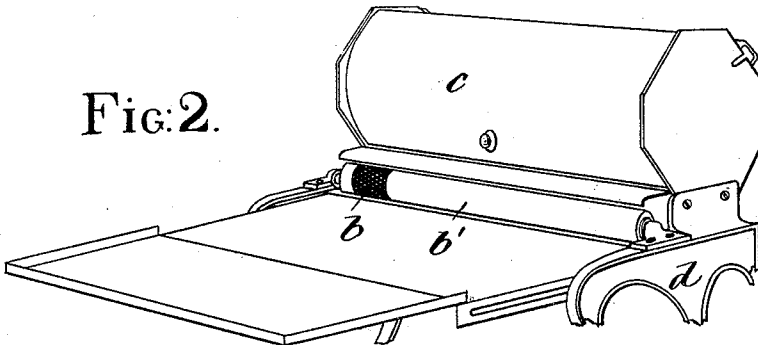
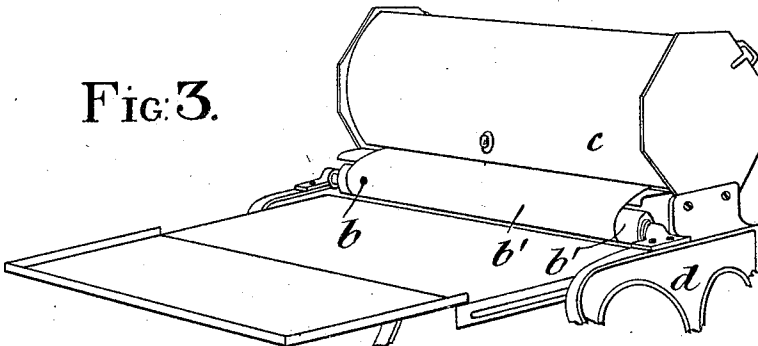


FIG. 3.



WITNESSES:

John C. Sanders
John A. Percival

INVENTOR;

Emile Augustus Klaber
BY *M. P. Mearns*
ATTY

UNITED STATES PATENT OFFICE.

EMILE AUGUSTUS KLABER, OF LONDON, ENGLAND.

LETTER-COPYING APPARATUS.

1,047,242.

Specification of Letters Patent.

Patented Dec. 17, 1912.

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To all whom it may concern:

Be it known that I, EMILE AUGUSTUS KLABER, citizen of the United States of America, residing at London, England, have
5 invented new and useful Improvements in Letter-Copying Apparatus, of which the following is a specification.

This invention relates to improvements in letter copying apparatus of the class in
10 which the letters to be copied together with a web of copying paper are passed between pressure rollers in order that the said copy-
ing may be effected. Hitherto in apparatus of this class it has been usual to employ
15 more or less complicated mechanical means for feeding the letters to the pressure rollers, such feeding means having their operation so timed that the letter passing between the rollers is free of said rollers before the
20 next is submitted to their action. In other words the feeding of the letters is so timed that one does not overlap the other. As will be readily understood, the employment of a mechanical feeding device whether of a simple
25 or complicated character naturally adds to the total number of parts comprising the apparatus and consequently to the cost of same.

Now it is the object of the present invention to provide means whereby the mechanical feeding of the letters to the pressure rollers may be avoided and to indicate to the operator the moment when the new letter may be introduced without fear of overlapping its predecessor.
35

The desired object is attained by providing the web of copying paper at equal predetermined intervals of its length with perforations, slits or marks, which are so arranged that when they coincide with a colored surface or mark, the preceding letter is clear of the pressure rollers and the next letter may be fed to said rollers without fear of its overlapping its predecessor. The colored
45 spot or mark may conveniently be placed upon the member over which the paper is drawn as it leaves the roll, or said spot or mark may be arranged at any other point of the machine where it is readily visible to
50 the operator.

While the embodiment of the invention is obviously not limited to any particular com-

bination of elements, for purposes of illustration I have appended drawings which show one embodiment of my invention and 55 in which—

Figure 1 is a perspective view showing a roll of copying paper having a guide perforation for the purpose stated. Fig. 2 shows a part of a copying apparatus upon 60 which is the spot or mark cooperating with the perforation or the like of the web. Fig. 3 is a perspective view with the web in the apparatus.

Referring to the accompanying drawings, 65 *a* indicates a roll of copying paper which at equivalent points of its length is provided with perforations *a*¹. It may here be remarked that although perforations are shown and in practice may be found to be 70 preferable to other means, it is within the scope of the present invention to substitute for such perforations slits, or, where it is desired, to leave the paper intact, marks of any suitable form may replace the perfora- 75 tions.

The perforations or their equivalents are spaced at such a distance apart as will insure the passage of one sheet between the rollers prior to the admission of a second 80 sheet, the time for the introduction of said second sheet being shown by the coincidence of the perforation with a colored surface *b* upon the roller *b*¹ over which the said paper is drawn in its passage from the container *c* 85 in the machine *d* to the pressure rollers.

By means of the present invention it is possible to effect a considerable economy in the cost of construction of apparatus of the kind referred to, and at the same time provide for the feeding of the letters in a manner such that their overlapping is avoided.

Claims:

1. In a letter copying apparatus, a member over which the copying paper is drawn, 95 said member being provided with an indicator to indicate the time when the letters should be fed to the apparatus.

2. In a letter copying apparatus, a member over which the copying paper is drawn, 100 said member being provided with a colored portion to indicate the time when the letters should be fed to the apparatus.

3. In a letter copying apparatus, in com-

ination, a frame, means for holding a roll
of copying paper positioned upon said frame
and a roller over which the copying paper
is drawn, said roller being provided with an
5 indicator to indicate the time when the let-
ters should be fed to the apparatus.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

EMILE AUGUSTUS KLABER.

Witnesses:

HERBERT D. JAMESON,
C. P. LIDDON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."