No. 813,094. PATENTED FEB. 20, 1906.

G. L. HILLIKER.

ATTACHMENT FOR CUTTING STENCILS.

APPLICATION FILED MAY 6, 1905.

Fig. 1.

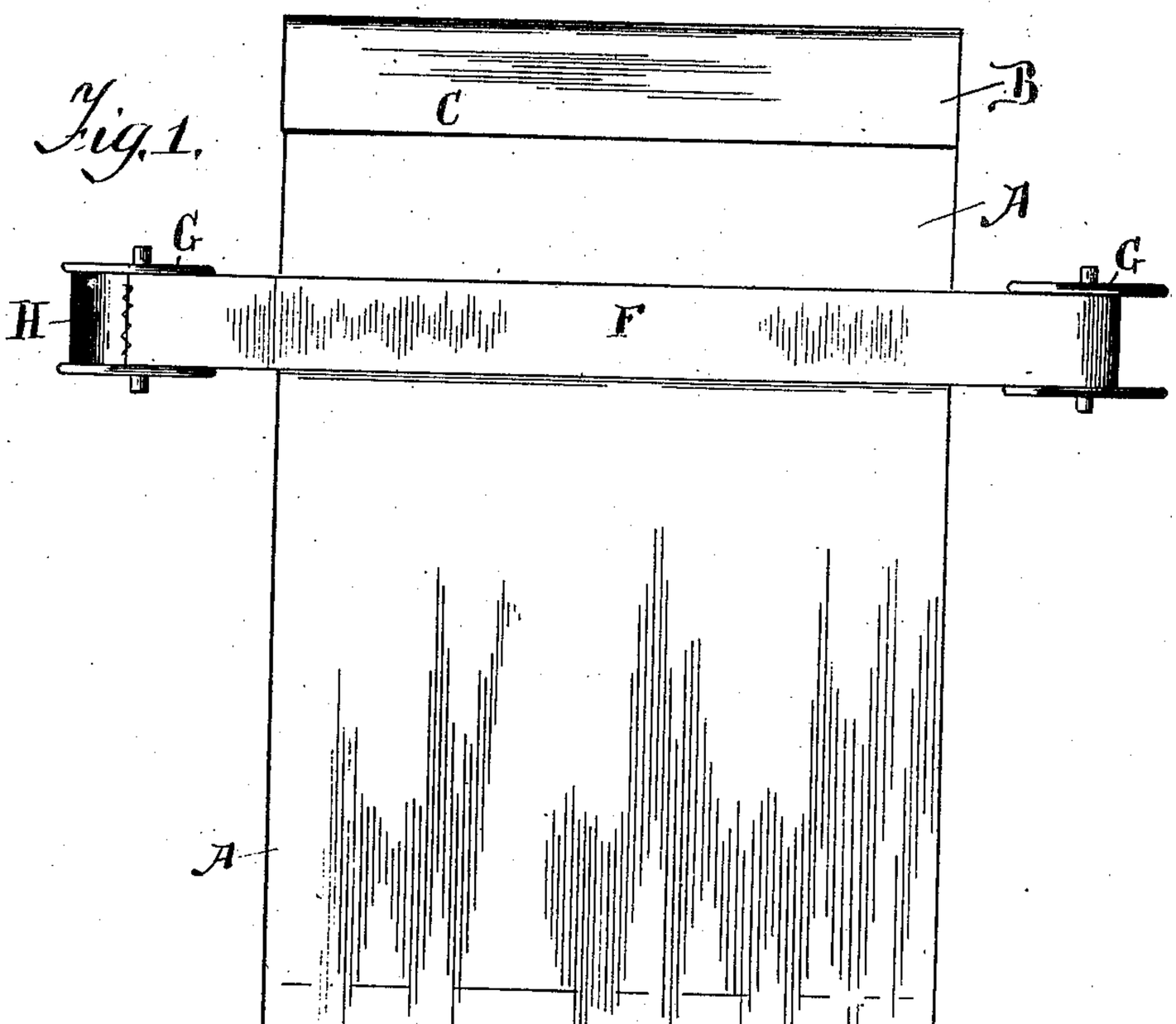


Fig. 2.

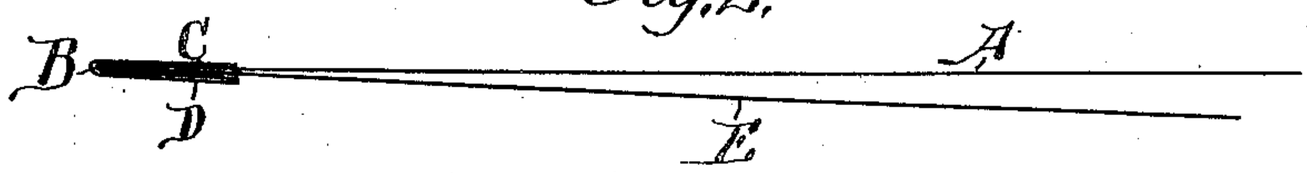
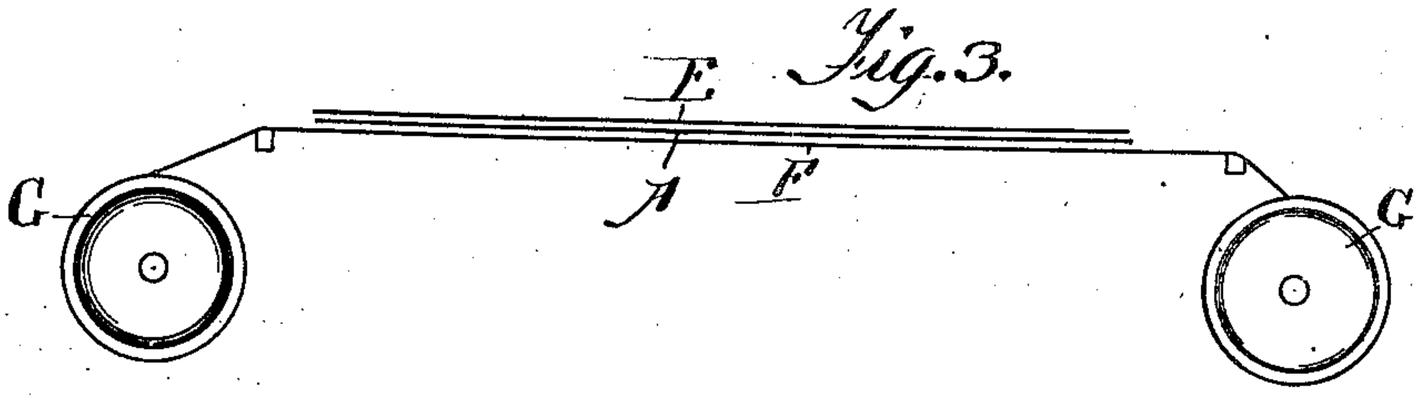


Fig. 3.



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ATTACHMENT FOR CUTTING STENCILS.

No. 813,094. Specification of Letters Patent. Patented Feb. 20, 1906.

Application filed May 6, 1905. Serial No. 259,146.

To all whom it may concern:

Be it known that I, GEORGE L. HILLIKER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Attachments for Cutting Stencils for Use in Duplicating-Machines, of which the following is a specification.

As ordinarily used each stencil-sheet is mounted upon a backing of stiff paper or similar substance, and between the stencil-paper and the backing is a sheet of bolting-cloth, which is adapted to remove the wax from the rear face of the stencil-sheet, and in front of the stencil-sheet is positioned a piece of tissue-paper for removing the wax from the face of the stencil-sheet when struck by the type. This arrangement is objectionable, for the reason that it necessitates the employment of four different layers of fabric or paper, which must be positioned in the type-writer before the operation of cutting the stencil can be performed. Another objection to this arrangement lies in the fact that the tissue-paper superimposed upon the face of the stencil-sheet is frequently cut by the type, so that some of the wax will adhere to the type, clogging the type and rendering it unfit for use.

The object of the present invention is to overcome the difficulties above enumerated and to provide a more easily-manipulated stencil to be used in combination with a strip of fabric adapted to be carried by the ribbon-spools of the type-writer, thereby obviating the necessity for using a sheet of tissue-paper of the full size of the stencil and at the same time providing a more reliable and satisfactory means for removing the wax from the stencil-paper.

The invention consists of the features of construction and combination of parts hereinafter described and claimed.

Figure 1 is a face view of a stencil-sheet, showing a strip of fabric mounted upon the ribbon-spools of a type-writer; Fig. 2, an edge view of the stencil-sheet and mounting therefor; Fig. 3, a view showing the relative position of the sheets in actual use.

In the drawings, A indicates a stencil-sheet which can be covered with wax or any other suitable composition of the kind ordinarily employed in the manufacture of stencil-sheets, and the stencil-sheet is pasted to the inner face of a mounting B, formed of stiff paper or other suitable material and consisting of a front flap C and a back flap D, as best shown in Fig. 2. Into the mounting is loosely inserted a sheet E of bolting-cloth or similar fabric, which serves as a backing for the stencil-sheet and is adapted to remove the wax from the rear face thereof when struck by the type in the operation of cutting the stencil. The reason for pasting the stencil-sheet to the forward flap C is that the stencil-sheet can be used but once and the bolting-cloth can be used repeatedly, so that it is desirable for each stencil to be provided with a mounting of the character indicated, allowing the same bolting-cloth to be inserted successively behind different stencil-sheets.

Th wax is removed from the front face of the stencil-sheet by means of a strip F of silk or other suitable fabric, which must be soft and pliable to perform the work intended, and such strip is of a proper width to be carried by the ribbon-spools G of an ordinary type-writer. The strip may be of any suitable length and can ordinarily be positioned in place by securing the end of the strip to the end of a type-writer ribbon H, which enables the same machine to be used either as a type-writer or for the purpose of cutting stencils, although in some cases it is desirable to make the strip of the full length of a type-writer ribbon and fasten it directly to the ribbon-spools.

In use the backing of bolting-cloth is loosely inserted into the mounting for the stencil-sheet and held between the upper and lower flaps, after which the stencil-sheet and the backing are inserted into a type-writer in the usual manner and the ribbon-spools are turned into a position to bring the silk strip across the face of the stencil-sheet. It will thus be seen that the stencil-sheet is interposed between two layers of fabric of a suitable character to evenly and perfectly remove the wax from the face and back of the stencil-sheet when struck by the type. The strip, which occupies the position of a type-writer ribbon, will obviously always be interposed between the type and the stencil-sheet, so that the operation of cutting the stencil can be performed in exactly the same way as the operation of type-writing, and

there will be no necessity for removing the type-writer ribbon entirely from the spools; but the spools will perform their ordinary function of giving longitudinal movement to the strip of material, thereby bringing different portions of material successively between the type and the stencil-paper, so that the wax will not be collected on a single portion of the strip, but will be uniformly distributed over a considerable area. In machines which are used exclusively for the cutting of stencils the strip can be of the full size of a type-writer ribbon, so that a single strip will serve its function for a long period of time before a sufficient amount of wax is collectd on the strip to interfere with its operation. At the same time the cost of operation is reduced to a minimum by reason of the fact that the strip is narrow and a fine grade of silk can be employed in place of the tissue-paper, which must of necessity be of the full size of the stencil-sheet without increasing the cost to the operator. Another feature of value is the fact that in preparing the stencil-paper for the market the only operation to be performed is pasting the flap-mounting to the stencil-sheet, thereby obviating the necessity for additionally pasting a sheet of paper and backing, which simplifies the manufacture to that extent. By providing but two layers of material to be carried by the type-writer cylinder instead of four, as are ordinarily used, less difficulty is experienced in mounting the stencil on the type-writer cylinder, and the operation of cutting the stencil as a whole is simplified. The stencil after being cut will be more perfect, for the reason that the silk strip employed in the cutting operation is highly superior to a sheet of tissue-paper, in that it cannot be cut or torn by the stroke of the type and serves, in combination with the bolting cloth, to remove the wax evenly and uniformly from both sides of the stencil-sheet.

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

1. The combination of a backing-sheet, a stencil-sheet and a strip adapted to be carried by the type-writer spools against which the type strikes to make an impression on the stencil-sheet, substantially as described.

2. The combination of a silk backing-sheet, a stencil-sheet and a narrow strip of silk adapted to be carried by the ribbon-spools, the stencil-sheet being interposed between the backing and the strip, and the backing and strip being adapted to receive and remove the particles of wax on opposite sides of the stencil-sheet when the strip is struck by the type, substantially as described.

3. The combination of a stencil-sheet, a flap-mounting at the head of the sheet secured thereto, a backing-sheet loosely inserted between the flaps of the mounting, and a silk strip adapted to be secured to a type-writer-ribbon and carried by the ribbon-spools, and superimposed upon the stencil-sheet and adapted in combination with the backing to receive and remove the particles of wax on opposite sides of the stencil-sheet when the silk strip is struck by the type, substantially as described.

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