A. K. TAYLOR.

PRINTING BLOCK AND METHOD OF MAKING THE SAME.

APPLICATION FILED OCT. 10, 1917. RENEWED OCT. 22, 1920.

1,378,573. Patented May 17, 1921.

FIG. 1.

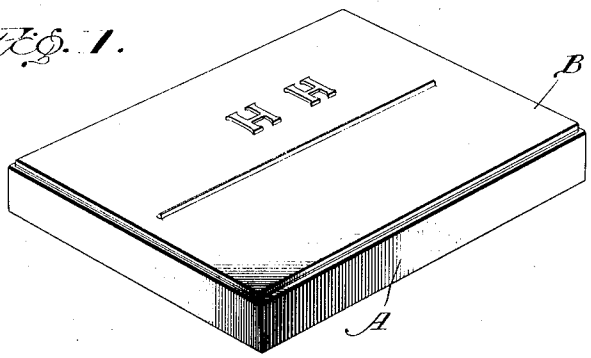


FIG. 2.

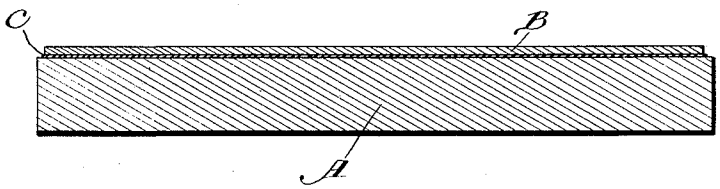
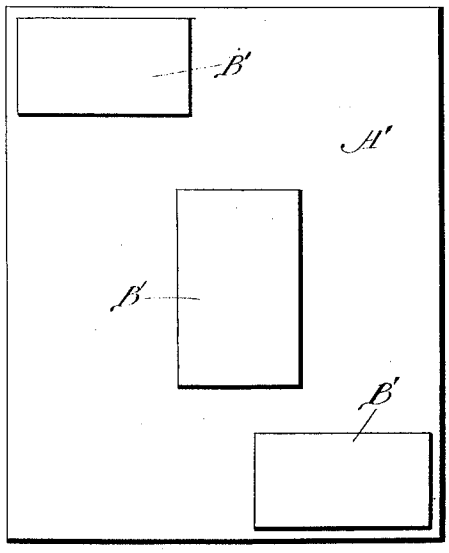


FIG. 4.



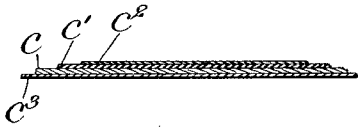


FIG. 3.

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UNITED STATES PATENT OFFICE.

ARTHUR K. TAYLOR, OF BALTIMORE, MARYLAND, ASSIGNOR TO TAYLOR REGISTERING PROJECTOR COMPANY, OF BALTIMORE, MARYLAND, A CORPORATION OF MARYLAND.

PRINTING-BLOCK AND METHOD OF MAKING THE SAME.

1,378,573. Specification of Letters Patent. Patented May 17, 1921.

Application filed October 10, 1917, Serial No. 195,763. Renewed October 22, 1920. Serial No. 418,765.

To all whom it may concern:

Be it known that I, ARTHUR K. TAYLOR, a citizen of the United States, and residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Printing-Blocks and Methods of Making the Same, of which the following is a specification.

The present invention relates to an improvement in printing blocks and particularly to an improved manner of mounting electrotype plates on suitable bases.

Modern printing practice frequently requires that a multiplicity of electrotype plates be mounted on a single base with means for securing them in position permitting adjustment or slight movement of the individual plates. For securing such plates in position it has been proposed to employ an adhesive which can be readily applied to the lower surface of the plate and loosened if necessary by the application of heat.

It has also been proposed to connect a plate to an individual base by an adhesive. This avoids the expense incident to making the base and plate integral and reduces the amount of space required to store a large number of plates, as they can be detached from their bases.

This practice of employing an adhesive to connect a base and plate has however not proved successful, because under the heavy pressure to which the plates are subjected in the printing press it is not unusual for them to increase slightly in length. When plates secured to a base by an adhesive, such as heretofore employed, are thus lengthened theadhesive gives way and the plate becomes detached from the base. A similar result occurs if the plates are not perfectly flat and in contact with the base at all points. Under this condition when the plate passes under the printing cylinder or comes in contact with the flat platen, the plate is pressed down against the base, being correspondingly lengthened a trifle, which however is sufficient to loosen the connection between it and the base.

The present invention provides means for connecting such a printing plate and base which will be free from the above noted objections and will maintain the desired relation between such parts under all service conditions.

In the accompanying drawing:—

Figure 1 is a perspective view of a printing block constructed in accordance with the present invention;

Fig. 2 is a sectional view through such a block;

Fig. 3 is a sectional view, on a greatly enlarged scale, of the intermediate pliable or flexible sheet by which the plate and base of the block are united;

Fig. 4 illustrates a relatively large base having a plurality of electrotypes secured thereon.

Referring to the drawings the improved block comprises a base A of any suitable material and a printing surface formed of a relatively thin metal plate B. The base A and plate B are securely united by placing between them a composite sheet including a fabric body C provided on one face with a coating of some suitable elastic substance, preferably rubber or similar material, C^1, and having superposed thereon a shellac coating C^2, a similar shellac coating C^3, being applied to the other face of the fabric section. The layers C, C^1, are very closely compacted, the body of rubber or similar material penetrating the spaces in the fabric body so that the entire sheet is of a pliable or flexible nature. By the application of heat the shellac surfaces C^2, C^3, are readily softened and caused to adhere closely under comparatively light pressure to the adjacent surfaces of the base A and plate B. A sheet of the character described is readily positioned and owing to the construction thereof adapts itself to any inequalities or uneven portions of the surfaces of the plate and base and will permit a limited relative movement between the two parts A—B, such as that due to lengthening of the plate when subjected to printing pressure, while retaining the connection between the plate and base.

By applying heat the plate B may be readily separated from the base A so that the latter can be used for or with a number of different printing faces, and as the plates B are made very thin, a minimum amount of metal is required, and a large number thereof can be stored within a very small space.

Instead of providing each plate B with a separate base, it is possible, by the present

invention, to mount a plurality of such plates B^1 upon a common base A^1 and to readily vary the relative location of such plates on said base.

The manner of constructing and the advantages of a block such as hereinbefore described will be readily understood and appreciated from the foregoing description. The intermediate elastic connecting means which is inexpensive to manufacture can be provided in relatively large sheets and readily cut to the size of the plate B.

Having thus described the invention what is claimed is:

1. The herein described method of securing an electrotype plate to a base which comprises interposing between the plate and base a sheet of fabric and rubber coated with an adhesive, and applying heat to cause the adhesive to adhere to the base and plate.

2. The herein described method of securing an electrotype plate to a base which comprises interposing between the plate and base a sheet of fabric and rubber coated with an adhesive which softens when heated, heating it so as to soften it and bring all parts of its surface in intimate contact with said base and plate and then allowing it to cool and harden.

3. The herein described method of securing an electrotype plate to a base which comprises interposing between the plate and base a sheet of fabric and rubber coated with an adhesive which softens when heated, heating it until softened, applying light pressure tending to bring said plate and base toward each other against the interposed matter and allowing it to cool and harden.

4. The herein described method of securing an electrotype plate to a base which comprises interposing between the plate and base a sheet of elastic rubber like material having its faces coated with an adhesive substance applying light pressure tending to bring said plate and base toward each other against the interposed matter to bring said adhesion into close and intimate contact with the surfaces of said plate and base.

5. A printing block comprising a base, a plate, and an intermediate, adhesive coated composite fabric and rubber sheet.

6. A printing block comprising a base, a plate, a sheet of fabric and rubber like material between said base and plate, a coating of adhesive material which softens when heated on said sheet and between it and said plate and in close and intimate contact with the under surface of said plate.

In testimony whereof I affix my signature.

ARTHUR K. TAYLOR.