May 28, 1929. G. B. SWANN 1,715,214

PRINTING PLATE AND BLOCK

Filed April 11, 1928

Fig. 1.

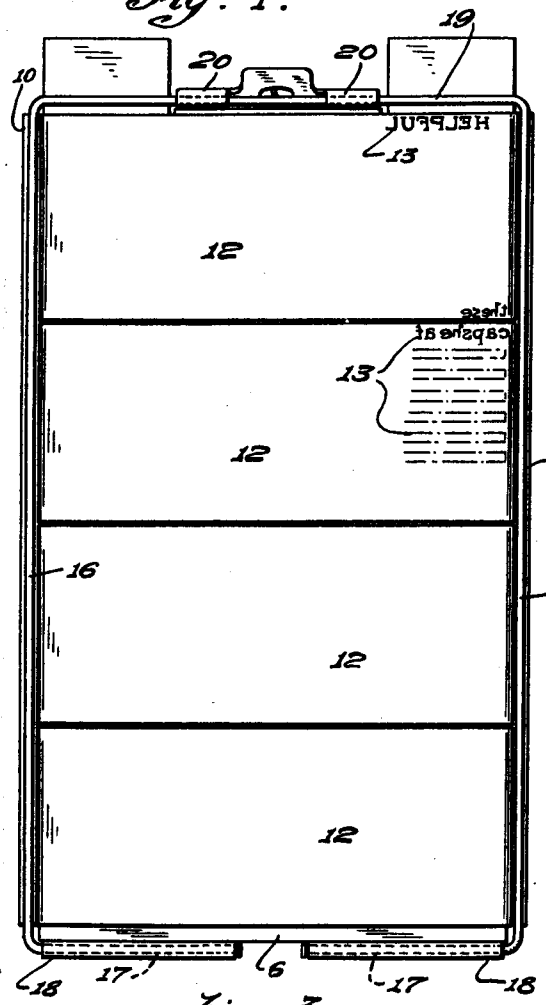


Fig. 2.

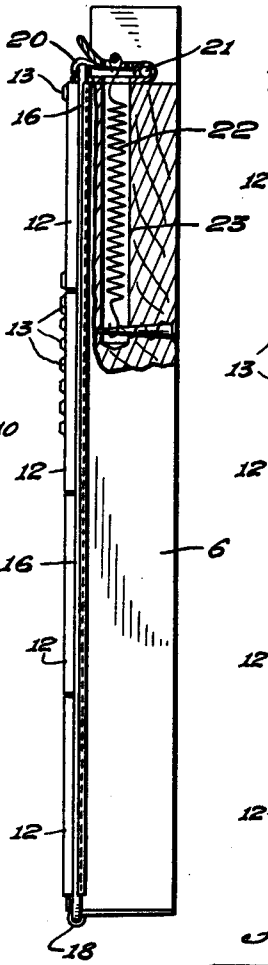


Fig. 4.

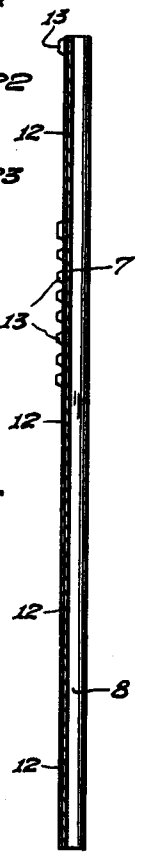


Fig. 3

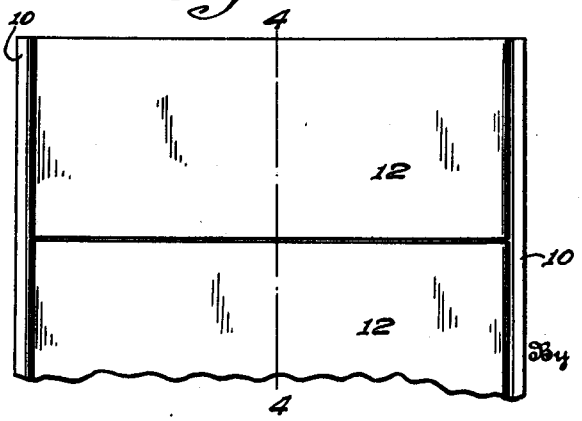
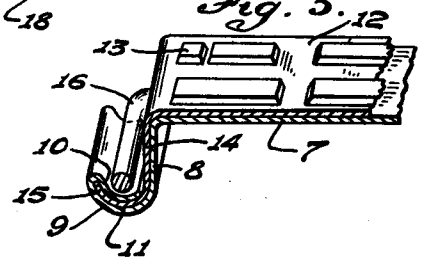


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE BETTS SWANN, OF LOUISVILLE, KENTUCKY.

PRINTING PLATE AND BLOCK.

Application filed April 11, 1928. Serial No. 269,277.

The present invention relates to a form or block used for printing purposes, and particularly pages of books, pamphlets and the like. The object is to provide a structure of a simple and novel character, by means of which type strips, such as those employed on an addressing machine, can be placed in assembled relation and used for printing complete pages of literature. The printing elements moreover are so constructed that they may be detached from the supporting blocks and stored so that they may be reused whenever desired.

In the accompanying drawings:

Figure 1 is a front elevation of one embodiment of the invention.

Figure 2 is an edge view of the same, partly broken away.

Figure 3 is a face view of a portion of one of the printing members.

Figure 4 is a longitudinal sectional view therethrough taken on the line 4—4 of Figure 3.

Figure 5 is a detail perspective view of a portion of one of the printing members, showing a portion of the retaining yoke engaged therewith.

In the embodiment disclosed, a supporting block 6 is employed that may be of wood or other suitable material, the same being rectangular in form and of any desired size. The printing member consists of a backing sheet 7, preferably of relatively light sheet metal, and having its side portions bent rearwardly, as shown at 8, with the margins outturned and reversely curved, as illustrated at 9 and 10, thus producing longitudinal grooves 11 in its side edges.

The printing elements proper consist of the usual strips 12. These are placed edge to edge upon the backing strip and have the type upset in the usual manner, as indicated at 13. In other words, they are made of metal, on which the lines of type are stamped by the well known type embossing machine. These strips 12 have their end portions rearwardly turned, as shown at 14 against the rearwardly turned portions 8 of the backing strip and have their terminals curved and engaged in the grooves 11, as shown at 15. The parts are permanently connected therefore by the backing sheet and constitute a printing plate. The plate is mounted on the outer face of the supporting block 6 with the rearwardly turned portions 8 and 14 engaging over the side edges of the same and with the flanged portions 9—10 and 15 outstanding therefrom.

To hold the plates in place, a yoke is employed having side arms 16 that lie in the flanges 10, these side arms being shown as inturned at one end of the block and as designated at 17, where they are rotatably engaged in suitable ears 18 and secured to said end of the block. The yoke is thus pivotally mounted on one end of the block. The side arms 16 at the other end are joined by a cross bar 19, that extends across the other end of the block and said cross bar is detachably engaged by a suitable latch 20 pivotally mounted at 21 on said end of the block. This latch is drawn inwardly by a spring 22 attached thereto and engaged in a socket 23 in the end of the block.

With this construction, it will be clear that any number of printing plates may be employed and these can be removably mounted on the supporting block, being firmly held in place by the yoke when said yoke is in turn held by the latch. A simple and effective structure is thus provided for printing any desired form of literature, preferably leaves of books, pamphlets and the like. It will be understood that the relative size and shape of the structure is unimportant and that it may be flat, as shown, or curved for use on cylinder presses.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description and it will be understood that various changes in the size, shape, proportion and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim, is:

1. A printing member of the character set forth, comprising a backing sheet, and a plurality of type strips overlying the sheet, said strips and backing sheet having their terminal margins seamed together and thereby interlocked.

2. A printing member of the character set forth, comprising a backing sheet having its side margins doubled upon themselves, forming grooves, and a plurality of type strips overlying the backing sheet and having their ends engaged in the grooves.

3. A printing member of the character set forth, comprising a backing sheet having its side margins turned backwardly and reversely doubled, forming grooves, and a plurality

of type strips overlying the backing sheet and having their end portions turned backwardly with their terminals outturned and engaged in the grooves.

4. A printing member of the character set forth, comprising a supporting block, a type element that overlies the same, and a yoke having side arms extending longitudinally along the opposite sides of the block and a cross bar at the end thereof, said yoke embracing the type element for holding it on the block.

5. A printing member of the character set forth, comprising a supporting block, a type element that overlies the same, a yoke pivotally mounted on the block and embracing the type element to hold it on the supporting block, and means for holding the yoke against swinging movement.

6. A printing member of the character set forth, comprising a supporting block, a type element that overlies the same, a yoke pivotally mounted on one end of the block and embracing the type element to hold it on the supporting block, and means at the other end of the block for securing the yoke against swinging and in operative position against the member.

7. A printing member of the charatcer set forth, comprising a supporting block, a type element including a sheet that overlies the block and has outstanding marginal flanges, and a retaining yoke having side arms that bear against the flanges to hold the sheet in place on the block.

8. A printing member of the character set forth, comprising a supporting block, a type element consisting of a backing sheet that overlies the block and has backwardly bent side margins with outstanding reversely bent portions forming grooves, type strips that overlie the sheet and having their ends engaged in the grooves, a retaining yoke pivoted to one end of the block and having side arms that bear upon the strips and backing sheet and a latch at the other end of the block for securing the corresponding end of the yoke thereto.

In testimony whereof, I affix my signature.

GEORGE BETTS SWANN.