

No. 887,216.

PATENTED MAY 12, 1908.

J. McNAUGHTON.
TYPE AND MEANS FOR SECURING THE SAME.
APPLICATION FILED JUNE 28, 1907.

Fig. 1.

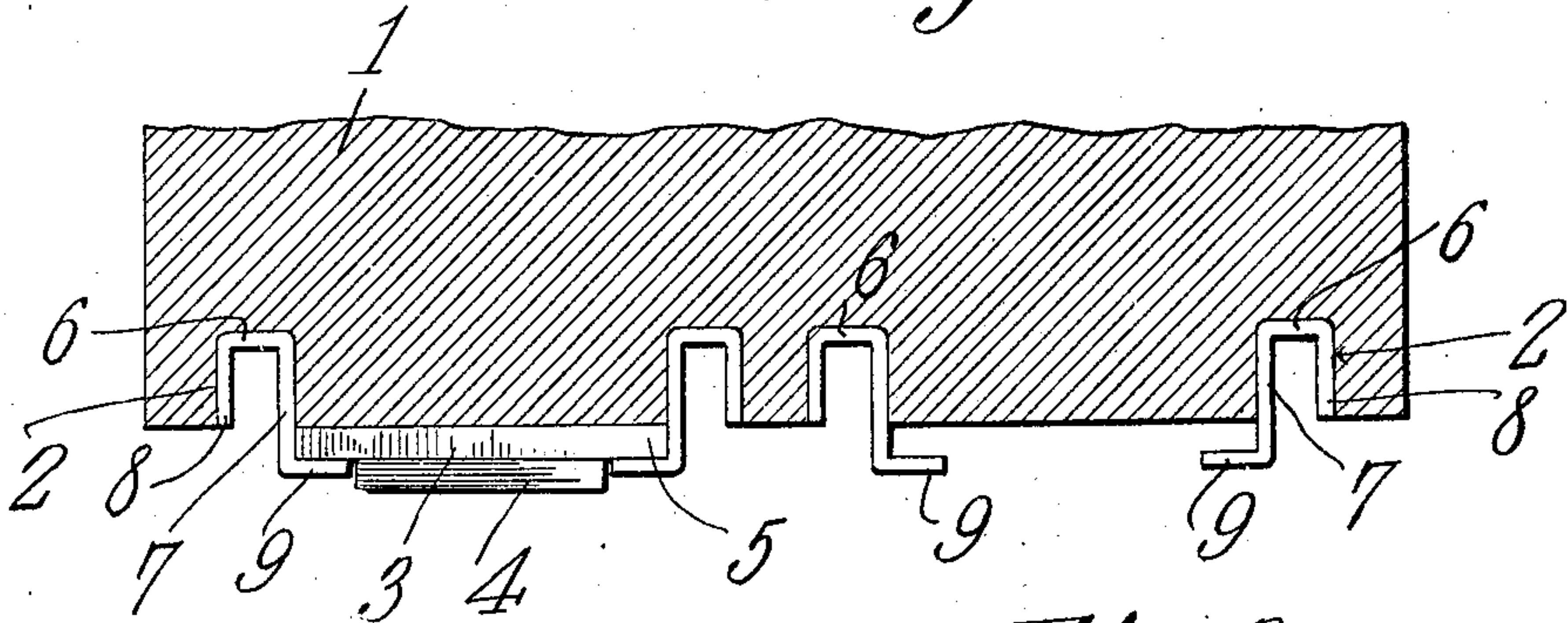


Fig. 2.

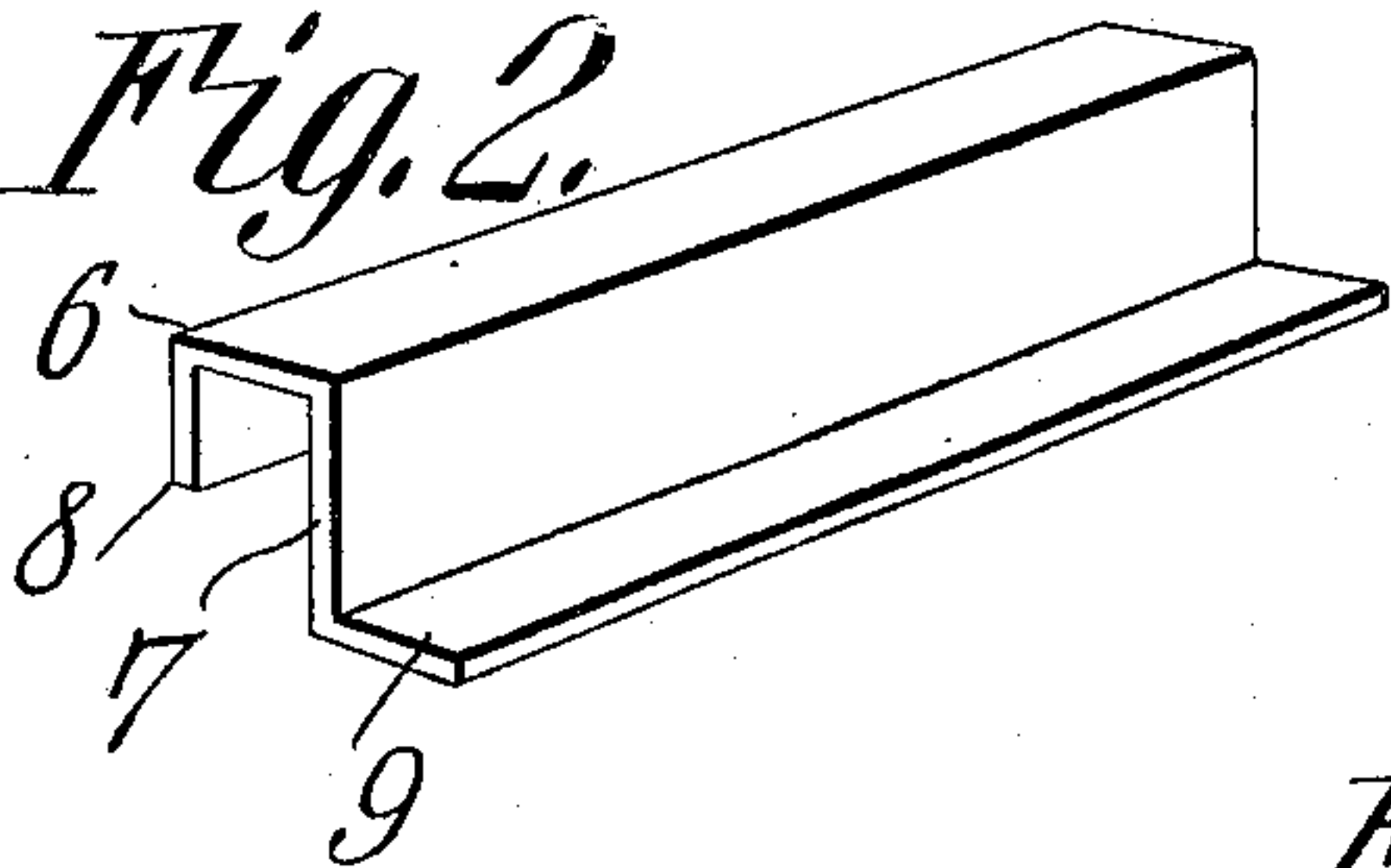


Fig. 3.

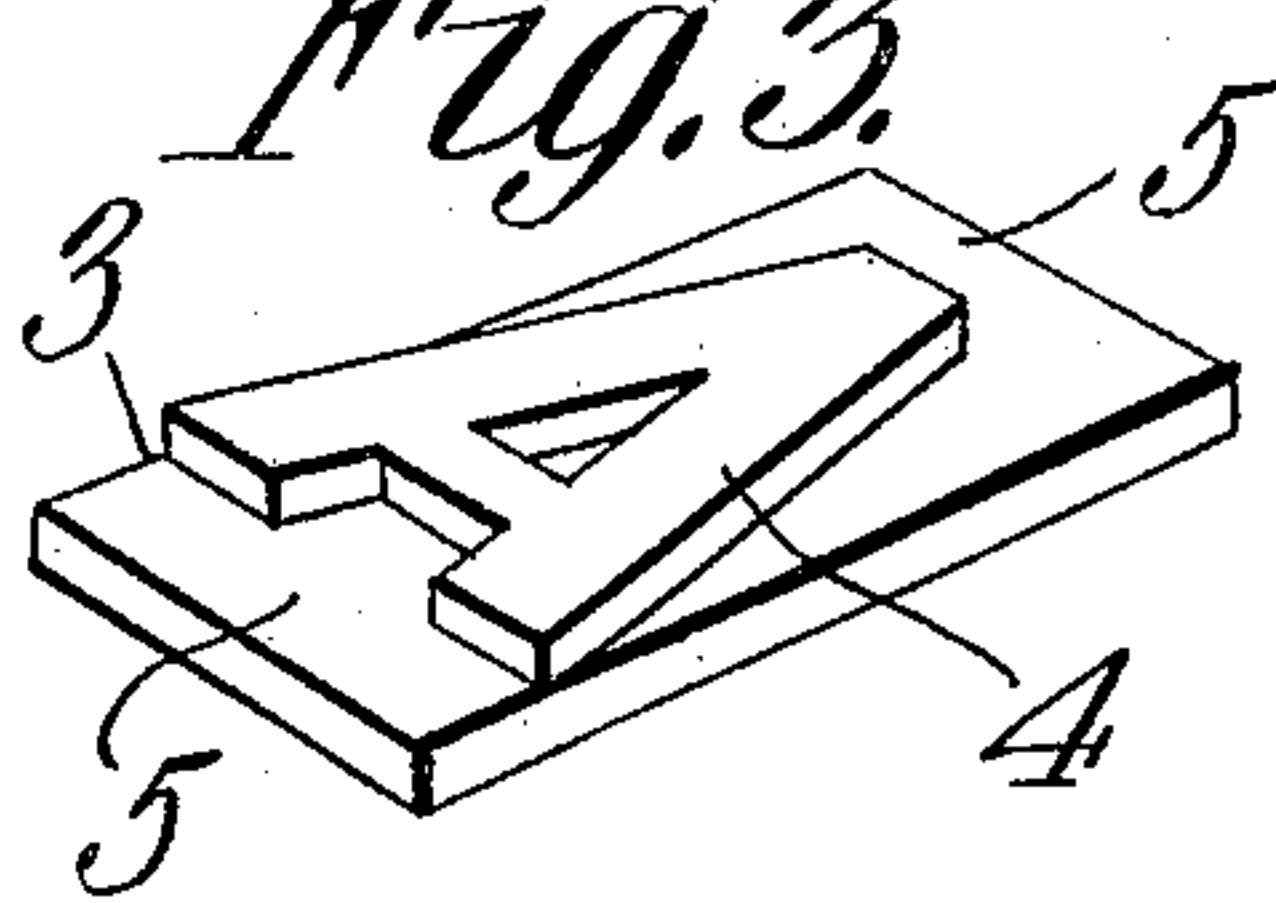


Fig. 4.

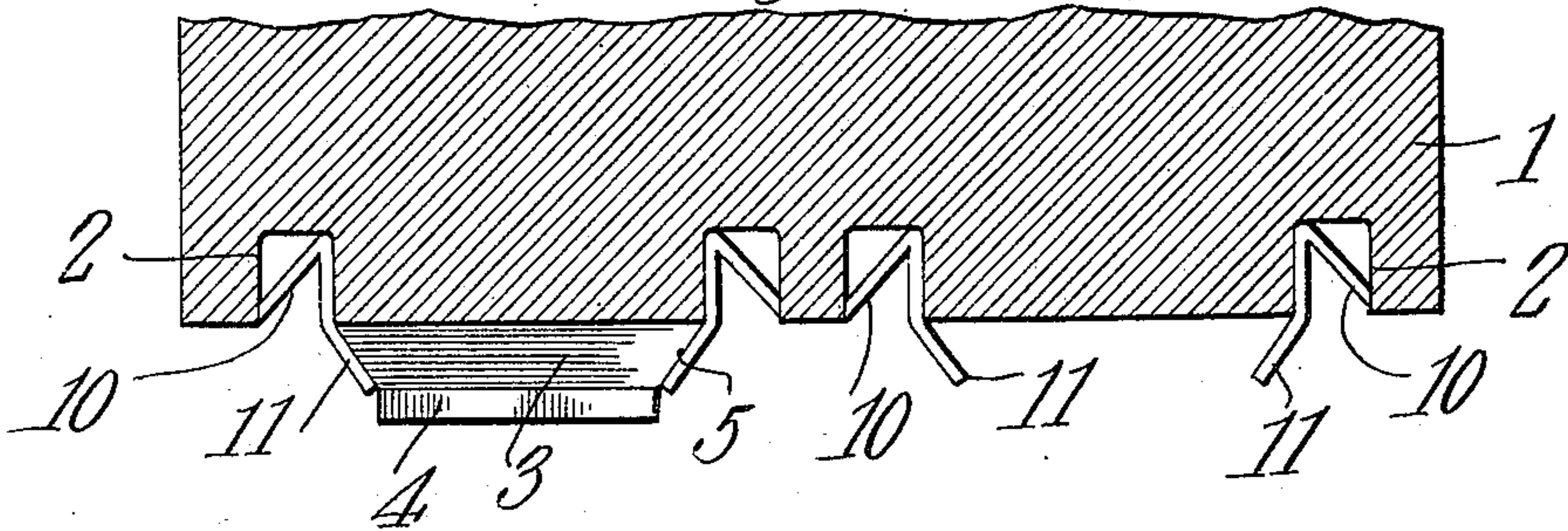


Fig. 5.

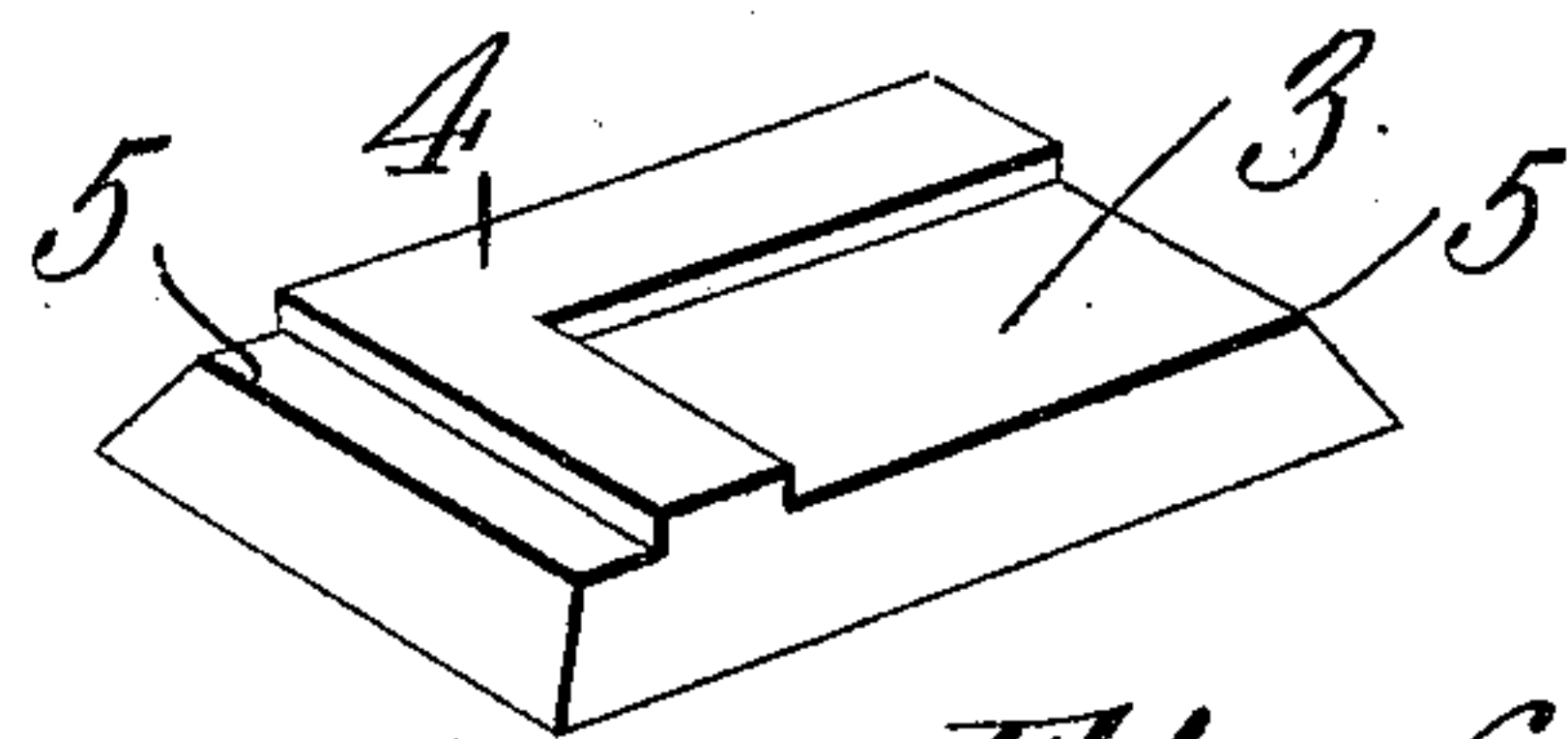


Fig. 6.

WITNESSES:

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TYPE AND MEANS FOR SECURING THE SAME.

No. 887,216.

Specification of Letters Patent.

Patented May 12, 1908.

Original application filed February 26, 1907, Serial No. 359,369. Divided and this application filed June 28, 1907.
Serial No. 381,366.

To all whom it may concern:

Be it known that I, JOHN McNAUGHTON, a subject of the King of England, residing at London, in the Province of Ontario and Dominion of Canada, have invented a new and useful Type and Means for Securing the Same, of which the following is a specification.

This invention has reference to improvements in type and means for securing the same; that is, the invention comprises both a novel form of printing type and a novel means whereby the type are secured to the type-carrying member of a printing press.

The object of the present invention is to facilitate the change of type and at the same time provide a means for locking the individual type in place directly upon the type-carrying face of the type-carrying member of the printing press, and for this purpose I have devised not only a locking means for the purpose but a particular form of type especially adapted for the purposes which I have in view.

The invention is intended particularly for use with simple forms of printing presses such as are used for the printing of cards, signs, dodgers, and other prints of like character.

The present invention is particularly adaptable to the press shown and described in my application Serial Number 359,369, filed February 26, 1907, for improvements in printing presses, and this present case is a division of that application.

The present invention consists essentially in a simple form of type wherein the body portions are thin and adapted to lie flat against the flat face of the type-carrying member while the body portion extends laterally away from the type characters in order to form ledges to be engaged by suitable fastening devices, the structure of which constitutes a part of this invention, and the type carrying member of the press is provided with longitudinal grooves so spaced as to receive the bodies of the type between them, while the fastening devices are arranged to be seated in the grooves and have portions that engage over the ledges formed by the projecting portions of the type bodies.

The fastening devices consist of clips so shaped as to cramp or jam in these grooves

and securely hold the type against displacement on the type-carrying member, while at the same time these clips may be easily removed from the grooves so as to release the type when it is desired to remove said type and to put others in their places.

By forming the type with thin, flat bodies they may be made by the stereotype process and such type are more readily assembled than are type with deep bodies such as are usually employed, and by the use of the clips I have devised these particular type are held firmly in place on the face of the type-bearing member without danger of displacement, and the use of spacing members is avoided. Also the use of special clamping means for holding the lines of type in place on the type-bearing member is no longer necessary.

The invention will be fully understood from the following detailed description, taken in connection with the accompanying drawings forming part of this specification, in which,—

Figure 1 is a cross section through a portion of a type-carrying member, showing one form of type and holding clips therefor in place; Fig. 2 is a perspective view of one of the clips used in connection with the structure of Fig. 1; Fig. 3 is a perspective view of a type such as is employed in connection with the clip shown in Fig. 2 in the structure shown in Fig. 1; Fig. 4 is a cross section of a type-carrying member like that shown in Fig. 1, but showing another style of type and the clip therefor; Fig. 5 is a perspective view of a clip such as shown in Fig. 4; and Fig. 6 is a perspective view of a type such as used in connection with the clip shown in Fig. 5 in the structure shown in Fig. 4.

Referring to the drawings, there is shown a type-carrying member 1 and in the type-carrying face of this member are formed a number of grooves 2 arranged in pairs spaced apart a distance equal to the length of the type to be used, and these pairs of grooves are themselves spaced to conform to the desired distance between the lines of type. In connection with such a type-carrying member I may use type such as shown in Fig. 3, that is, type each having a thin, rectangular body 3 on one face of which is formed a raised printing character 4. In the particular structure shown in Fig. 3 the base is of the

same thickness throughout, with right angle edges, while those portions of the body at the top and bottom of the printing character are extended in the plane of the body to form ledges 5—5. In order to secure this form of type to the face of the type-carrying member clips such as illustrated in Figs. 1 and 2 are used. These clips consist of a U-shaped body 6 with one leg 7 longer than the other leg 8 and terminating in a right angle extension 9 turned away from the U-shaped body. Now, when the U-shaped portion 6 is inserted in one of the slots 2 in the type-carrying member 1 it will fit snugly therein, being properly proportioned for this purpose, while the right angle portion or lip 9 engages over the corresponding ledge formed by the top or bottom extension of the type body 3. When opposing ends of such a type are grasped by the clips 6, with their body portions fitting snugly in the grooves in the type-carrying member, the type 3 will be held firmly against the flat face of the type-carrying member. Any tendency of the type to move away from this flat face is opposed by the cramping action of the clips in the grooves 2, because any movement of the type would tend to twist the clips on their longitudinal axes, as will be readily understood. When the type are seated on the type-carrying member 1 and the clips are in place, these type are held in any adjusted position without danger of displacement during the printing operation, and the necessity of spacing members is therefore obviated.

In Fig. 6 the ledge 5 of the type body 3 is beveled instead of being made rectangular as in Fig. 3, and the clip used in connection with this form of type has a triangular body 10 with a lip 11 at an angle thereto, so that when the type shown in Fig. 6 is in place against the front face of the type-carrying member the lip 11 will bear against the beveled edge of the type, while the angular portion 10, when seated in a groove 2, will engage and cramp or bind therein, as will be readily understood, while the lip 11 will hold the type firmly in place in the same manner as the type shown in Fig. 3 are held by the clips 6.

In either form of clip the body portion has one diameter such that the said body portion may be inserted in the groove in the direction perpendicular to the face of the type-carrying member and another diameter such that when the body portion is moved on a longitudinal axis it will cramp in the groove against displacement therein. Thus the clips may be easily inserted in the grooves, but any tendency of the type to move away from the face of the type-carrying member will immediately lock the clips in the grooves, thus securely fastening the type in place.

Type of this character may be made very

cheaply by the stereotype process and the matter to be printed may be readily set up without spacing members, while the type are held to the face of the printing member without any special clamping means such as are necessary with type of ordinary character having deep bodies.

I claim:—

1. In a printing press, a type-carrying member having a series of longitudinal grooves in its type-carrying face, type having bases adapted to the face portion of the type-carrying member between two grooves thereof, and clips for holding the types to the type-carrying member each clip being composed of a single piece with a body portion adapted to be inserted in and removed from a groove in a direction perpendicular to the face of the type-carrying member, said clip being so shaped that when turned on its longitudinal axis it will cramp in the groove and be thereby held against displacement therein.

2. In a printing press, a type-carrying member having a flat face with a series of longitudinal grooves therein, type having flat bases with extended ledges adapted to the face portion of the type-carrying member between two grooves, and clips each formed of a single piece with a lip arranged to engage over the ledges on the type, and a body portion shaped to enter the groove in a direction perpendicular to the base of the type-carrying member and to cramp in said groove against accidental displacement when the body portion is turned on its longitudinal axis.

3. In a printing press, a type-carrying member having a flat face with longitudinal grooves therein, type having flat bases, and clips each formed of a single piece with a lip to engage the type body, and a body portion having one diameter such that said body portion may be inserted in a groove in a direction perpendicular to the face of the type-carrying member, and another diameter such that when the body portion is moved on a longitudinal axis it will cramp in the groove against displacement therein.

4. In a printing press, a type-carrying member having longitudinal grooves in one face, of substantially rectangular cross section, type adapted to said face between the grooves, and clips each formed of a single piece with body portions conforming to the cross sectional shape of the grooves and provided with an extension for engaging the type, the body portion being shaped to cramp in the grooves when turned on its longitudinal axis.

5. In a printing press, a type-carrying member having longitudinal grooves in one face of substantially rectangular cross section, type adapted to said face between the grooves and provided with extended ledges, and clips each formed of a single piece hav-

ing a body portion conforming in shape to
the cross sectional shape of the groove and
adapted to be inserted in or withdrawn from
a groove in a direction perpendicular to the
5 face of the type-carrying member, said clip
also having a lip exterior to the groove and
shaped to engage over a ledge on the type.

In testimony that I claim the foregoing as
my own, I have hereto affixed my signature
in the presence of two witnesses.

JOHN McNAUGHTON.

Witnesses:

C. A. WILCOX,
F. H. POLLARD.