

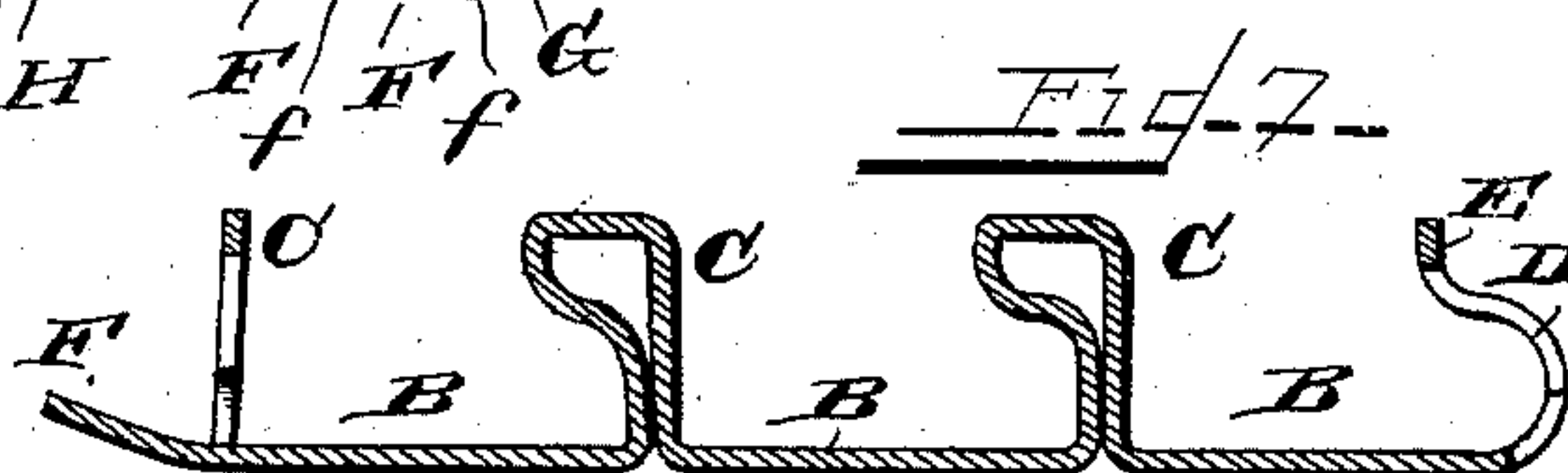
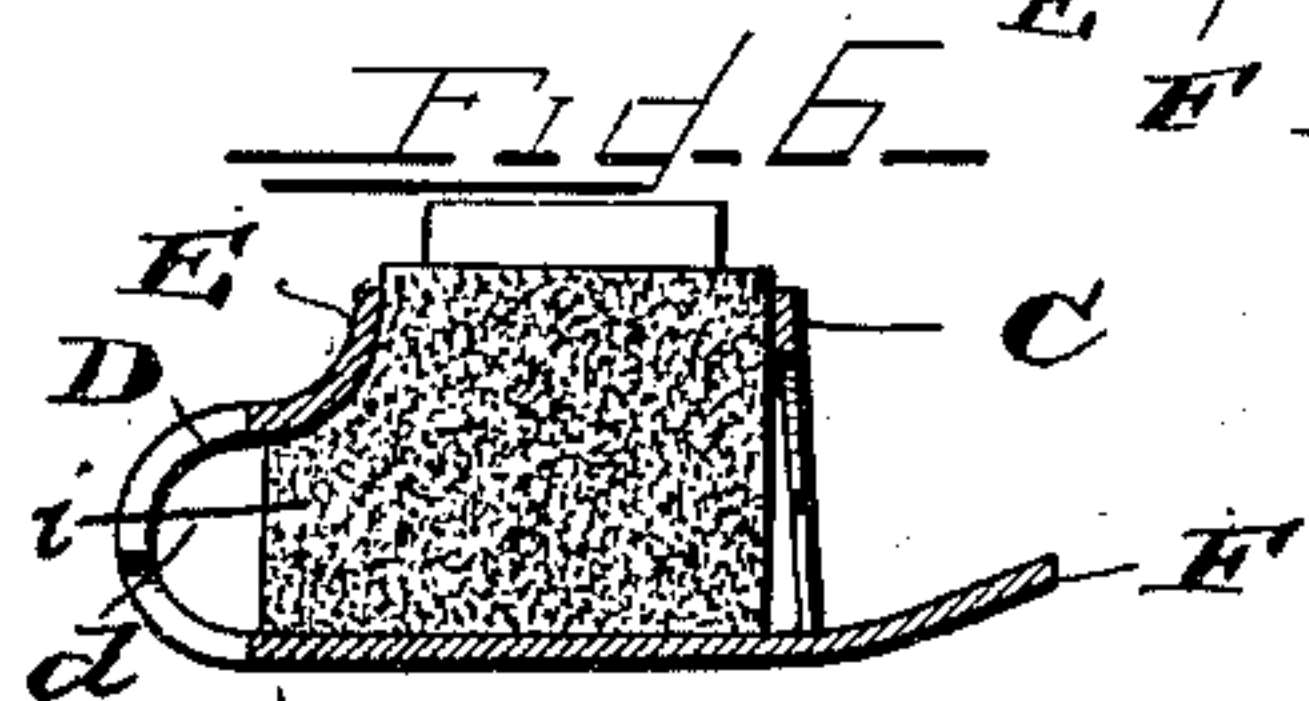
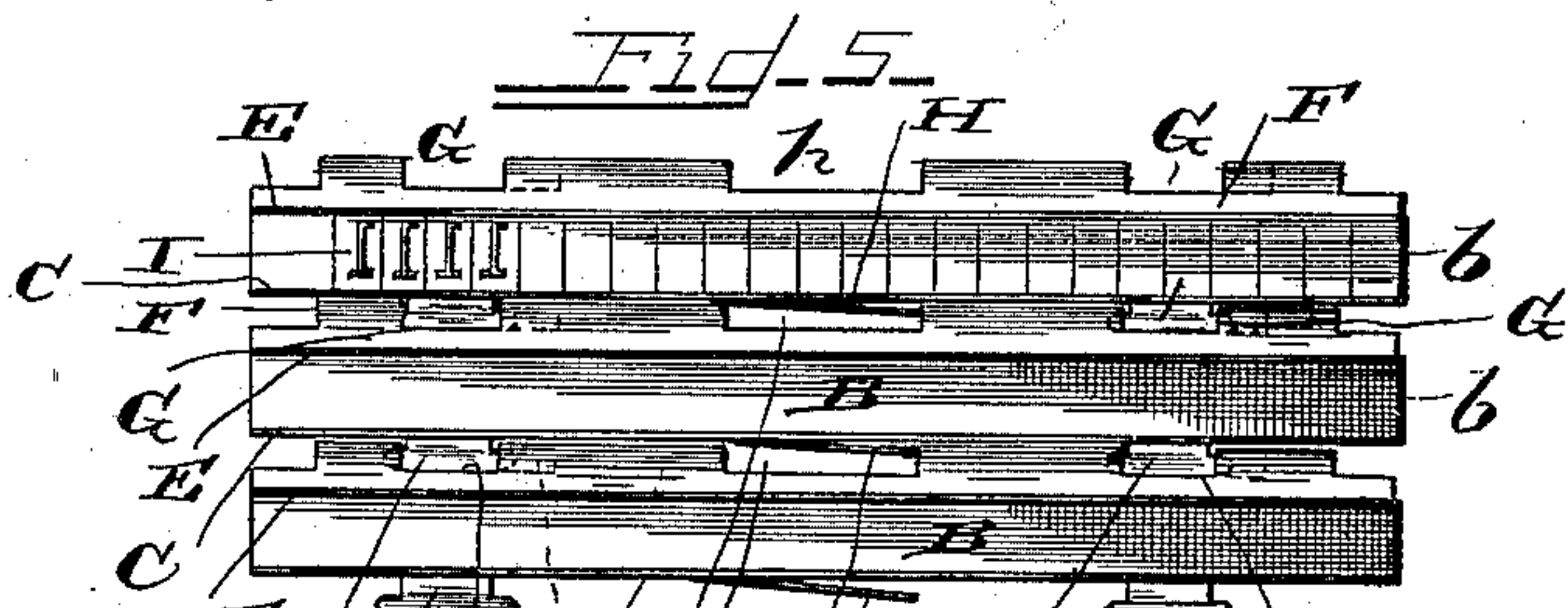
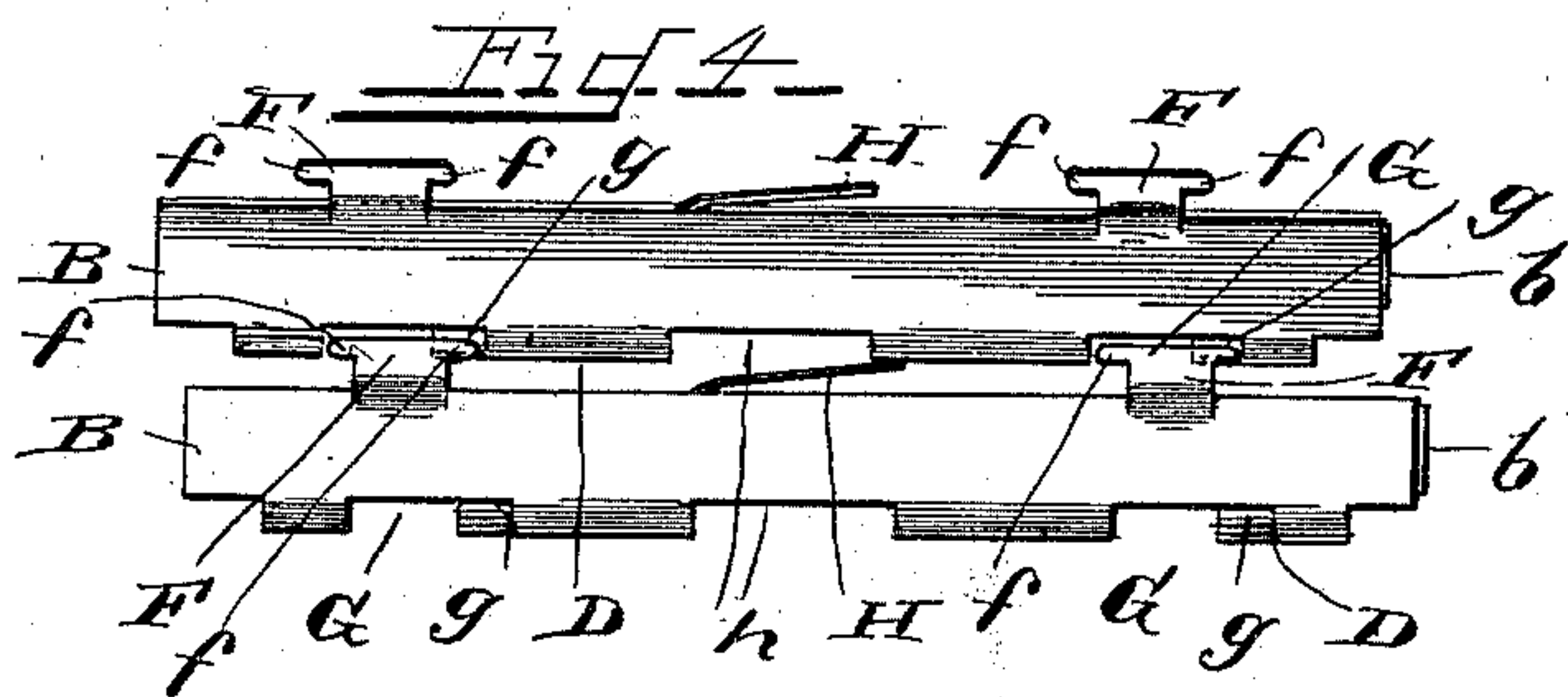
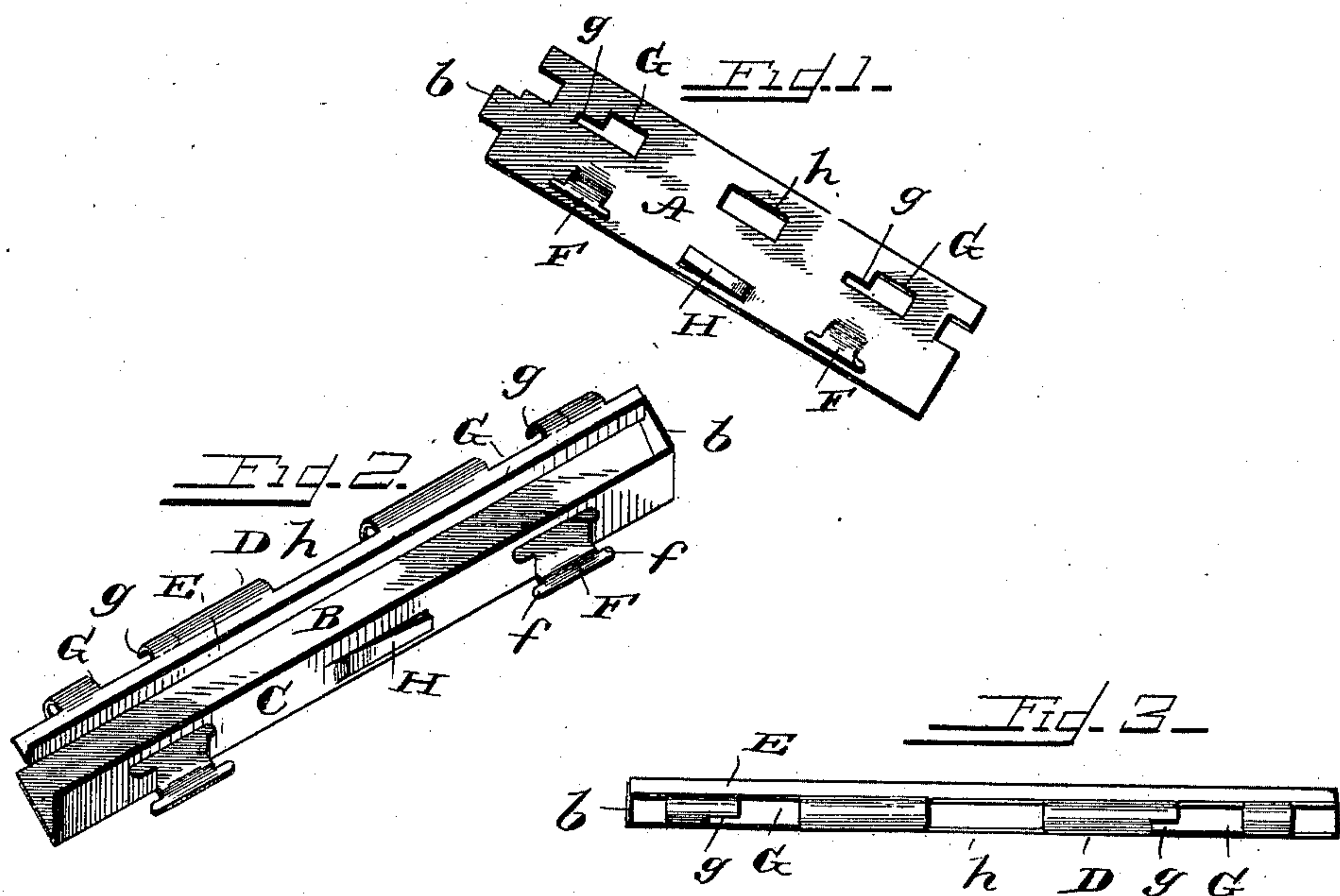
No. 656,443.

Patented Aug. 21, 1900.

J. S. DUNCAN.
TYPE HOLDER.

(Application filed Nov. 20, 1899.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH S. DUNCAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADDRESSO-
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TYPE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 656,443, dated August 21, 1900.

Application filed November 20, 1899. Serial No. 737,584. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. DUNCAN, 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 Type-Holders, of which the following is a specification.

My invention relates to certain new and useful improvements in devices for receiving and holding rubber type.

A primary object of my invention is to provide a holder for rubber type which can be articulated or linked with similar holders to form a band or chain for use in connection with addressing or other printing machines and as a convenient method of storing and keeping them in order.

Another object of the invention is to provide rubber-type holders which can be linked together to form a band or chain and each of which combined link and holders can be separated from the band without in any way disturbing the others and without removing or otherwise disturbing the type held therein.

A further object is to provide a device for holding rubber type of novel construction and which can be formed out of a single sheet of metal and stamped into shape from a blank in one operation, and a still further object is to provide a device of this character having a type-groove in which the type can be set easily and quickly and which will retain the types in their proper position for printing or permit of their ready removal without breaking the chain or necessitating the withdrawal of the holder.

My invention has other objects in view which will be fully described hereinafter in the detailed description of the invention as shown in the accompanying drawings, in which—

Figure 1 illustrates the blank stamped out properly and ready to be formed into shape. Fig. 2 is a perspective view of a completed holder. Fig. 3 is a side view of the holder. Fig. 4 shows the bottom of two holders and the manner in which they are articulated. Fig. 5 is a face view of several holders linked together. Fig. 6 is a cross-sectional view.

Fig. 7 illustrates in cross-section a holder provided with three type-grooves.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the blank, which is stamped out of a sheet of metal of the desired thickness and character and in such a manner that it can be formed into shape, as shown in Fig. 2, in one operation. When it is so formed, the holder has a longitudinal type-groove B for receiving and holding the type, this groove being open at one end and closed at the other end by an upturned lip *b*. This groove is provided with one plane side C, while its other side D is curved and bent to form a recess *d* to accommodate the hinging projections and also lateral extension to the type-groove for receiving the lateral projections of the type. The upper part of the curved side D is turned upward to form a plane side E, substantially parallel with the opposite side C, and these sides CE terminate below the face of the types, so as not to interfere with the printing operation.

The side C has two hinging projections F, having end extensions *f*, and the curved side D is provided with openings G, corresponding in position to the projections F and having lateral extensions *g* at one end. I also provide a spring-tongue H, extending longitudinally on the side C, preferably at or about its middle, and the curved side D has a corresponding opening *h*. These projections and openings are provided to enable the holders to be articulated or linked together, and the tongue is a locking device to retain them in place. Each holder constitutes a link of a band or chain formed by articulating a number of holders, and as all of the holders are made alike any one of them may be removed from the band without affecting the others or disturbing them or the type in any way. To articulate or link two holders, they are turned into an angular relation to each other for convenience and the projections of one holder are inserted in the openings of the other holder in the manner illustrated in Fig. 4, and then the holders are moved longitudinally

in opposite directions until the tongue H has entered the opening *h*, Fig. 5. This may also be accomplished, of course, by moving only one of the holders longitudinally while holding the other in a stationary position.

In Fig. 4 the backs of two holders are shown in position for articulation to bring out more clearly the arrangement of the different parts; but in actual practice the holders are articulated with the faces of the holders toward the operator and one holder is moved until the tongue slips into the opening *h* and engages the end wall thereof. The opening G is not as long as the end of the projection F; but the extension *g* of the opening permits the end of said projection to enter the opening. When the holders are thus linked together, the extensions *f* on the projections will operate freely in the recess *d* and have a bearing against the wall thereof, the opening G being slightly longer than the width of the neck of the projections F to provide a loose hinging movement. The extension *g* is located at the bottom of the curved side D, Fig. 3, and when the holders are in a flat position both extensions *f* of the projections F will have a bearing against the wall of the recess *d*; but when the holders are at an angle to each other, as in the act of articulation, the tongue engaging the end wall of opening *h* maintains the holders in their proper relation to each other and prevents the projections from slipping out of the openings G, although only one extension *f* on each projection may be bearing against the side D, the other extension being aligned with the extension *g* of the opening G. It will therefore be observed that when the holders are articulated the extension on one end of the projections will always have a bearing and retain the holders together as long as the tongue is in locked position. To separate the holders, they are again turned into an angular relation to each other for convenience and the tongue is pressed down, (which can be readily done with the thumb-nail,) thus releasing the tongue from engagement with the end wall of opening *h* and unlocking the holders, after which one or the other holder is moved longitudinally until the projections slip out of the openings G.

The improved combined link and type-holder herein described is essentially different from those of the prior art in the respect that any holder of a chain can be separated and removed without in any way affecting the others, this operation being made possible by reason of the fact that the types thus do not in any way control or affect the locking of the links together. The types are arranged in the groove and in the lateral extension thereof; but they do not extend into the recess *d*, and therefore they do not in any way interfere or control the hinging of the links together, as the hinge projections of the holder operate entirely within the recess *d* beyond the lateral extension of the groove, it being understood that this lateral extension

of the groove is located between the groove proper and the recess for a purpose herein described.

The rubber types I are preferably made of substantially the shape shown in cross-section in Fig. 6, with a lateral projection *i* to enter the lateral extension of the type-groove; but I do not limit myself herein to the use of type of this particular shape or material, as the shape may be varied and the type made of other substances. In order to hold the type more securely in the groove B, I prefer to incline the sides C and E of the holder inwardly to a slight extent, so that the groove will be comparatively narrow between the upper edges of the sides, at least sufficiently to cause the sides to make a close contact with the body of each type below its face. This same result may be secured by inclining only one side, as C; but I prefer to incline both sides, as shown.

It is customary to use tweezers to facilitate picking the types singly out of a case or other source of supply and setting them up in a holder, and by reason of the fact that my improved holder is adapted to secure the types without compressing the same and because of the spreading sides of the holder this operation can be accomplished with facility and the types can be slid along in the holder with great freedom. As the type have nothing whatever to do with the hinging devices, it will be observed that any holder may be removed from the chain without affecting the others and that the type may be removed from any holder without disturbing the hinging devices.

Instead of providing only a single type-groove B, as shown in Figs. 2 and 5, I may provide each holder with two or more grooves, and in Fig. 7 I have shown in cross-section a holder having three type-grooves, being in all other respects made exactly like the single-grooved holder.

I am aware that changes may be made in the details of construction of my improved link and type-holder to adapt it for types of other shapes than that shown and for other purposes, and I would therefore have it understood that I reserve the right to make all changes as fairly fall within the spirit and scope of the invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A combined link and type-holder provided with a type-groove to receive and hold the type and hinging devices for connecting two or more holders together, a spring locking-tongue on one side of the holder and an opening in the other side thereof to receive the tongue of another holder, substantially as described.

2. A combined link and type-holder provided with a type-groove to receive and hold the type and hinging devices for connecting two or more holders together, a longitudinally-

extending spring-tongue on one side of the holder and an opening in the other side thereof to receive the tongue of another holder, substantially as described.

5 3. A combined link and type-holder provided with a type-groove to receive and hold the type and hinging devices for connecting two or more holders together, an opening in one side of the holder and a longitudinally-
10 extending and outwardly-projecting spring-tongue on the other side of the holder adapted to enter the opening of another holder and lock the two holders together by engaging the end wall of the opening, substantially as described.
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4. A combined link and type-holder having one plane side and a curved side forming a groove in which the type are held, hinging devices for connecting two or more holders
20 together, a spring locking-tongue on the plane side and an opening in the curved side to receive the tongue of another holder, substantially as described.

5. A combined link and type-holder provided with a plane side and a curved side forming a groove in which the type are held and a recess adjacent to said groove, and devices on the holder for linking two or more
25 holders together after the type have been arranged in the groove, said devices operating in the recess without interfering with or being affected by the type in the groove, substantially as described.

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6. A combined link and type-holder provided with a groove in which the type are held, linking projections on one side of the
35 holder and corresponding openings on the other side thereof to receive the projections of another holder before or after the type have been arranged in the groove, and a spring-tongue for locking two holders together, substantially as described.
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7. A combined link and type-holder having a plane side and a curved side forming a groove with a lateral extension to receive and hold the type and a recess adjacent to the extension of the groove, linking projections on the plane side adapted to be passed through
45 openings in the curved side of another holder before or after the type have been arranged in the groove and operating in said recess without interfering with the type to link the holders together, substantially as described.
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