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TYPE HOLDER.

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962,146. Patented June 21, 1910.

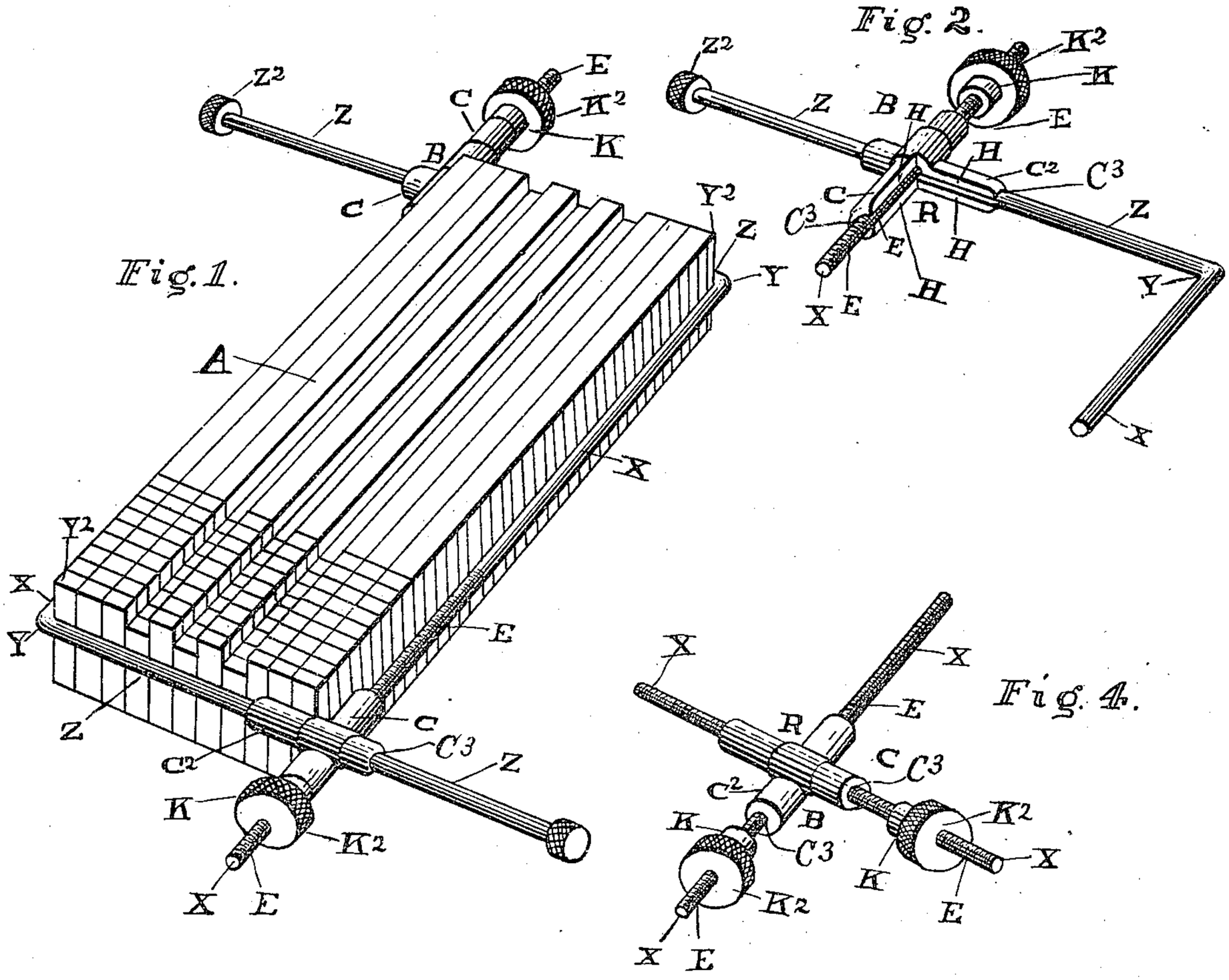

Fig. 1.

Fig. 2.

Fig. 4.

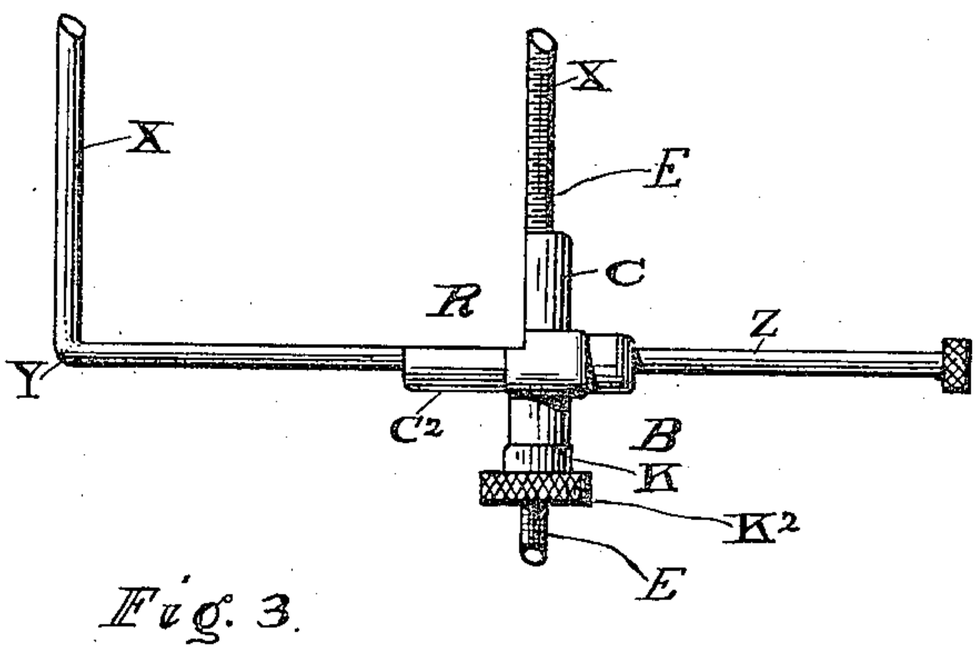

Fig. 3.

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TYPE-HOLDER.

962,146. Specification of Letters Patent. Patented June 21, 1910.

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To all whom it may concern:

Be it known that I, HENRY HIGGIN, a citizen of the United States, and a resident of the city of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Type-Holders, of which the following is a specification.

The several features of my invention and the various advantages resulting from their use conjointly or otherwise will be apparent from the following description and claims.

In the accompanying drawing, making a part of this specification, and in which similar characters of reference indicate corresponding parts,—Figure 1 is a view in perspective of devices illustrating my invention, and the application of those devices to a form of type. Fig. 2 is a perspective view of either one of the corner devices shown in Fig. 1, and portions of the rods used in connection with this corner device. Fig. 3 represents a top view of the corner device and portions of the connecting rods. Inasmuch as the bottom of such device is like the top, this view, Fig. 3, may also be considered to represent a bottom view of this device. Fig. 4 is a view in perspective of the corner device, where the screw construction of the one half of it is repeated in the other half.

I will now describe my invention in detail.

A indicates a series of type set up in what is known as a form. This form may be of any desired size as to breadth and length.

My device for holding the form and securing the type together in their set-up position is as follows: I provide corner pieces adapted to fit on any corner of the form. These devices are substantially alike, and therefore the description of one of them will suffice as a description of each of them.

B indicates a corner piece having a right angled recess R. This corner piece is provided with two hollow arms or sleeves C, C^2. The recess R is formed by the arms C, C^2, just mentioned. Through one of the arms C is a passageway C^3, and through the other arm C^2 is a similar passageway C^3. These hollow arms C, C^2 are at a right angle to one another. The passageway of one arm in the corner bracket is not in the same horizontal planes as is the passageway of the other arm in the same corner bracket. The reason for this last named location of these passageways C^3, C^3, will be hereinafter apparent.

I provide bent connections more or less flexible, and each of these connections is bent at a corner Y. This corner fits against a corresponding corner Y^2 of the form of type. One limb X of one of these connections extends through the passageway C^3 of one of the arms C of one of the corner pieces B aforementioned, while the other limb Z extends through the passageway C^3 of one of the arms C^2 of a corner piece B located at the corner of a form diagonally opposite the corner where the first named corner piece is located. In like manner, another connection bent at Y incloses the other two sides of the form A. One limb X of the same passes through the passageway C^3 of the adjacent arm C of one of the corner pieces B, while the other limb Z passes through the arm C^2 of the opposite corner piece B. These portions of both of the aforesaid bent connections X, Z, which pass through the arms, C, C^2, C, C^2, may each be provided with screw threads. Such a construction is illustrated in Fig. 4. Each of these screw threaded ends which projects through its respective arm of the corner piece B enters a screw threaded piece or nut K, which has preferably a thumb portion K^2. By screwing these nuts forward toward the respective adjacent arms, the connections or tie pieces X, Z, which their screws respectively engage are drawn forward and tight up against the sides of the form A.

The inside surface of the sleeves C, C^2, where they form the corner are cut away, or are formed flat, producing the faces H. This construction enables a side of each of the rods Z and X to extend through that side of each arm C and C^2 which is next to the form A. Such a construction enables each rod Z to come into contact with the form for the whole distance of that side of the form against which it lies. This close frictional contact of the rod or tie connection with that entire side of the form A against which it bears is a great advantage, because all of the type are thereby evenly pressed against and the better held in position. An additional advantage which I intentionally obtain from this construction is the following: Wherever the form is not very heavy, the screw thread of one sleeve or arm of the corner piece

B may be omitted. This construction is illustrated in Figs. 1, 2 and 3. Where the screw thread of one arm in a corner piece B is omitted, the drawing up of the screw threaded rod in the adjacent sleeve by its nut will serve to force that exposed side of the rod not screw threaded, and which is in the cut away sleeve against the adjacent side of the form, and the pressure thus exerted and friction presented will serve to quite efficiently hold the form A in shape and to hold the type in position. A short further explanation of this feature of construction by means of the drawing and the parts that are lettered therein is now offered, as possibly assisting to enable this construction to be more easily understood. Thus in the corner pieces B of Figs. 1, 2 and 3, the rod X has its free end provided with a screw thread E, and this passes through one arm of a corner piece B, and has a nut K, K^2, which engages the screw thread of the limb X. That limb Z of the tie connection which passes through the arm C^2 has in this case no screw, but is smooth. When the nut K, K^2 is screwed forward, the limb X at Y draws tightly and the sides of X and Z are tightly pressed against the respective adjacent sides of the form. This pressure and the friction generated prevent the limb Z from slipping away from the side, and hence from slipping through its arm (sleeve) C^2.

The free end of the limb Z is preferably provided with a knob or other detent Z^2, which prevents the limb Z from slipping through the arm (sleeve) C^2 through which it extends. Where there is no screw thread on the limb Z, the latter can be the more readily and quickly adjusted, as it (the limb Z) can be quickly slipped into place, so that its corner Y shall fit against the proper corner Y^2 of the form. It is to be understood that while the end portions, screw threaded, of the tie connections are of metal or equivalent substance which will take and retain a screw thread, the remainder of the tie straps may be of any suitable material for their use in holding up the sides of the form. Preferably the entire connection is made of metal.

In the description aforementioned, the word sides in relation to the form is employed to denote two ends as well as the two sides of the form, it often occurring that the two ends are as long as the sides, this being especially the case where the form is a rectangle.

Ordinarily two brackets, such as I have described, are sufficient, the two being located at opposite corners, diagonally speaking, of the form. But when desired, such brackets may be present at each corner. In the latter case, the tie pieces will each extend only on one side of the form. One size of bracket is sufficient for every size of form, but the ties for the form are preferably of various lengths respectively adapted to be used with correspondingly various sizes of form.

Among the various advantages resulting from the employment of my invention may be noted the following: The devices belonging to the invention are economic of manufacture and are durable. They are easily manipulated. This clamping device is always ready. It holds the form of type very securely, and reduces the possibility of the type dropping out, and of the form breaking apart. The very construction of the parts assists when the screws are tightened to bring each corner of the form to a right angle and to return the form in such a right angled condition.

What I claim as new, and of my invention and desire to secure by Letters Patent, is:—

1. In a device for tying together a form, the combination of a tie strap whose end is provided with a screw thread and a corner piece having main portion provided with two arms between which is a right angled recess adapted to receive the form of type, each of the arms and the main portion respectively perforated for the passage therethrough of the screw threaded portion of the said tie strap, and screw threaded heads or nuts adapted to engage with that end of the tie strap which extends beyond the corner piece and to be screwed forward against the adjacent end of the corner piece, substantially as and for the purposes specified.

2. In a device for tying together a form, the combination of a tie strap whose end is provided with a screw thread and a corner piece having main portion provided with two arms between which is a right angled recess adapted to receive the form of type, each of the arms and the main portion respectively perforated for the passage therethrough of the screw threaded portion of the said tie strap, and devices adapted to engage the protruding ends of the tie strap and to hold them in connection with the corner pieces tightly against the form, substantially as and for the purposes specified.

3. In a device for tying together a form, the combination of a tie strap whose end is provided with a screw thread and a corner piece provided with two arms between which is a right angled recess adapted to receive the form of type, each of the arms and the main portion respectively perforated for the passage therethrough of the screw threaded portion of said tie strap, and a device adapted to engage the end of the tie strap and to hold it in connection with the corner pieces tightly against the form, substantially as and for the purposes specified.

4. In a device for tying together a form,

the combination of two tie straps, each tie strap bent in two branches, right angled to one another, and the two corner pieces located diagonally opposite the corners of the form, the adjacent ends of the tie straps respectively passing through perforations in the corner pieces in alinement with them, and nuts engaging the screw threaded portion of the tie straps, substantially as and for the purposes specified.

5. In a device for holding together a type-form, a corner piece having two arms, each arm perforated for the passage therethrough of the appropriate tie connection, the arm formed flat on the side next the form of type, and open at the perforation to allow of the tie connection coming into contact with the type-form, and means for tightening the tie connection, substantially as and for the purposes specified.

HENRY HIGGIN.

Attest:

STARBUCK SMITH,

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