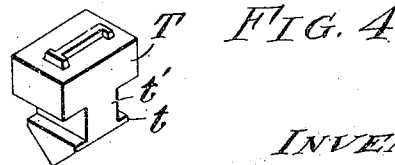
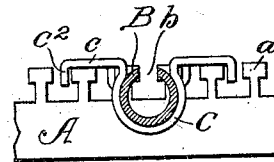
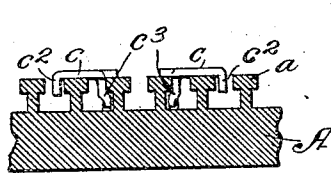
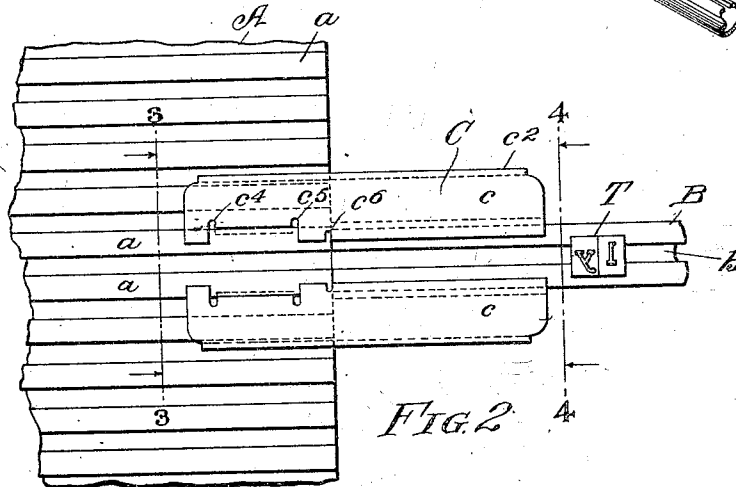
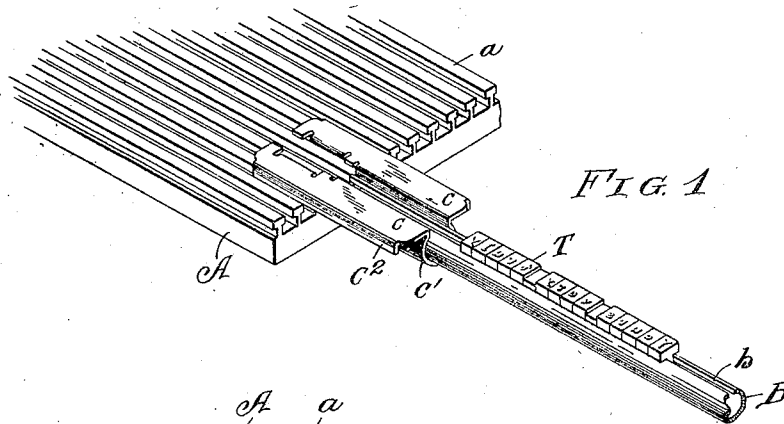


J. J. ZEITZ.
TYPE TRANSFER DEVICE.
APPLICATION FILED MAY 24, 1909.

1,049,965.

Patented Jan. 7, 1913.



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UNITED STATES PATENT OFFICE.

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TYPE-TRANSFER DEVICE.

1,049,965.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Application filed May 24, 1909. Serial No. 497,901.

To all whom it may concern:

Be it known that I, JOHN J. ZEITZ, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Type-Transfer Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

10 The object of this invention is to provide a simple and efficient device for assisting in the transfer of type between holders thereof. The device is adapted primarily for use between a holder for a single row of type and a member having a plurality of type holders, and comes into play either when the form is being assembled by shoving lines from the single row onto the plural holder or when the form is being distributed from the latter holder or portions of it temporarily removed for correction.

15 In the particular form shown, my transfer device is designed to cooperate on one side with a type holder in the form of a tube having a longitudinal slot, and on the other side with a member having a plurality of rails with overhanging edges providing type-holding channels between them. My device furnishes the means for insuring the alignment between the type channel of the split tube and the selected channel of the cooperating member. In the form of the device shown the parts are particularly arranged for use with type grooved on its opposite sides. My holder is equally adaptable for use with a multi-channeled member extending in a plane, or are shaped, or cylindrical, as desired.

20 The invention includes broadly a device adapted to clamp itself to the multi-channeled member and provide means for holding the single-row holder. My device is preferably made of a single piece of sheet metal cut and bent to produce the result desired. The specific form, as well as the broad idea, is included within my invention.

25 In the drawings, Figure 1 is a perspective view of my transfer device in use with a multi-channeled type holder and a single-row holder; Fig. 2 is an enlarged plan of my device associated with the two holders;

Figs. 3 and 4 are cross sections on correspondingly numbered lines in Fig. 2, looking toward my transfer device; Fig. 5 is a perspective view of a standard multigraph type as set out in their Patent 836,026, with which my device is well adapted to cooperate.

Referring to the parts by letters, A represents the multi-channeled type holding member which may be a storage member or a printing surface, either curved or flat. This member is provided with a plurality of rails *a* which have overhanging edges, whereby under-cut channels are provided adapted to confine rows of type grooved on its opposite edges. Fig. 5 represents such type, indicated by T. The type has a base *t* and a shank *t'*. The shanks are adapted to occupy the space between the enlarged heads of the rail while the base stands below these heads.

B represents the holder for the single row of type, this holder comprising, as shown, a tube having a longitudinal slot *b*. The width of this slot is substantially the same as the distance between the heads of the rails *a*.

My invention provides a suitable connecting member between the tube B and the multi-channeled member A, whereby the tube may be held in alignment with any of the channels in said member and type freely transferred from one to the other. My device, as a whole, is designated C. It comprises, as shown, a single piece of sheet metal cut and bent to grasp the member A and also the member B. To this end the sheet metal device has the following portions, namely: two substantially flat portions *c* connected by a depending partially cylindrical or trough-like portion *c'*; downwardly extending reinforcing edge flanges *c''*; downwardly turned resilient tongues *c'''* adapted to frictionally grasp the outer sides of a pair of adjacent rails *a*. The tongues *c'''* are bent inward slightly at their lower portions, as shown in Fig. 3, to obtain a hold beneath the heads of the rails. The tongues *c'''* are provided from the original plane of metal by making transverse slots and bending the metal between the slots

downwardly. To provide a good job, these slots are preferably carried outwardly slightly beyond the bend of the tongues, as shown at c^4 and c^5 . Similarly the inner edge of the bend of the trough-like portion c' is defined by a slot c^6 . The plane of the metal between the slots c^5 and c^6 and between the slot c^4 and the end of the device form projections adapted to lie on the face of the rails, as shown in Figs. 2 and 3.

It will be seen from the above that my device may be made very simply of sheet metal. It is put in place simply by being shoved endwise into the multi-channelled type holder and holds itself in place by the grip of the tongues on the rails. When in place, it provides means for holding the holder B so that its slot b may be conveniently aligned with the slot between the rails grasped by the tongue. After the type has been assembled, or distributed or corrected in the particular channel with which my device coöperated, the device is simply pulled out endwise by hand and replaced with reference to another of the several channels in the member.

The drawings show the multi-channelled type holder as being a flat member. It will be readily apparent, however, that exactly the same transfer device is utilizable with the multi-channelled member in the form of an arc or drum. The spring tongues c^3 take hold of the two adjacent rails with equal facility whether the rails are absolutely parallel or radial. The flanges c^2 are in the nature of reinforcers, and are not formed to clamp under the heads of the rails so that it is immaterial whether the two rails adjacent to them actually contact with the flat portions of the device or not. By making the clamping of the device simply on the two rails between which the channel in action is located, my device may operate as well with either of the extreme channels as with any of the intermediate channels.

Having thus described my invention, what I claim is:

1. The combination, with a multi-channelled member and an independent typeholder, of a connecting device having a pair of projections to engage in channels of the multi-channelled member, and a portion to extend about and slidably embrace said typeholder.

2. The combination with a multirailed member and a single-row typeholder, of a connecting device having a pair of projections to engage between rails, and means to receive the typeholder.

3. The combination with a multi-channelled member, of a device having a resilient portion whereby it is adapted to be clamped thereto, and having means for holding a holder for an individual row of type.

4. The combination with a type holder

having a plurality of parallel rails with overhanging edges, a member having resilient portions adapted to engage said rails and support a holder for a row of type.

5. The combination of a type holder having a plurality of parallel rails with overhanging edges, whereby said member may hold parallel lines of individual grooved type, a device adapted to resiliently engage some of such rails and frictionally hold itself thereto, said device being formed to support a holder for an individual row of type.

6. The combination of a type holder having a plurality of parallel rails with overhanging heads and a device adapted to rest on two adjacent rails and having tongues to resiliently engage the sides of said rails and act against lower corners of the heads thereof.

7. The combination with a type holder having a plurality of parallel rails with overhanging edges, and a type holder in the form of a tube with a longitudinal slot, of a connecting member having a pair of tongues adapted to engage some of the rails of the first mentioned type holder and provided with means for slidably embracing said tube.

8. The combination with a type holder having a plurality of parallel rails, and a tube having a longitudinal slot, of a member made of a single piece of sheet metal and having one portion bent to embrace the tube and another portion bent to present tongues to engage the rails.

9. A device of the character specified made of a single piece of sheet metal and having resilient tongues, and a trough-like portion formed to embrace a tube.

10. A device of the character specified having in combination two longitudinal portions, a connecting portion not extending the full length of the longitudinal portion, and a projection from each longitudinal portion beyond the end of the connecting portion.

11. A device of the character specified having two longitudinal portions connected by a trough like portion terminating short of the longitudinal portions, said longitudinal portions having tongues beyond the ends of the trough like portion.

12. A device of the character specified having in combination two longitudinal portions, a connecting portion not extending the full length of the longitudinal portions, tongues on each longitudinal portion beyond the end of the connecting portion, said longitudinal portions projecting toward each other adjacent to the ends of said tongues.

13. A device of the character specified made of a single piece of sheet metal and having in combination two longitudinal portions, a trough-like connecting portion and a tongue on each longitudinal portion be-

yond the end of the connecting portion, each of said longitudinal portions being provided on its outer edge with a reinforcing flange.

14. The combination, with a member having a plurality of parallel overhanging rails providing type channels and a type holder which it is desired to aline therewith, of a connecting device having tongues to engage

certain rails and provided with a portion to embrace said type holder.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

JOHN J. ZEITZ.

Witnesses:

ALBERT H. BATES,
BRENNAN B. WEST.

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