No. 628,442. Patented July 11, 1899.

C. J. BOTZ.

TYPE CASE.

(Application filed Apr. 5, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig 1.

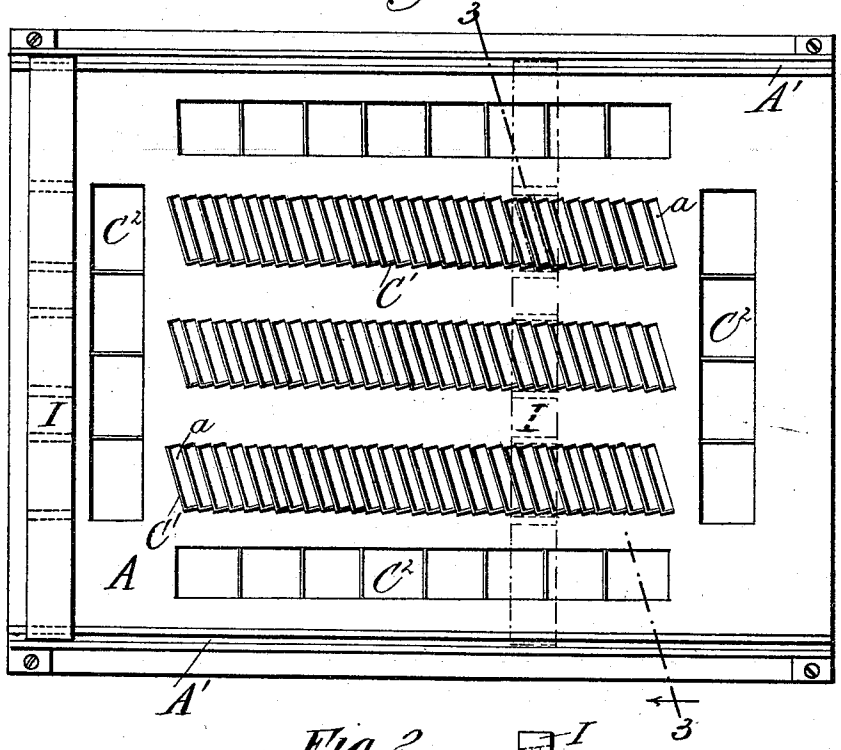
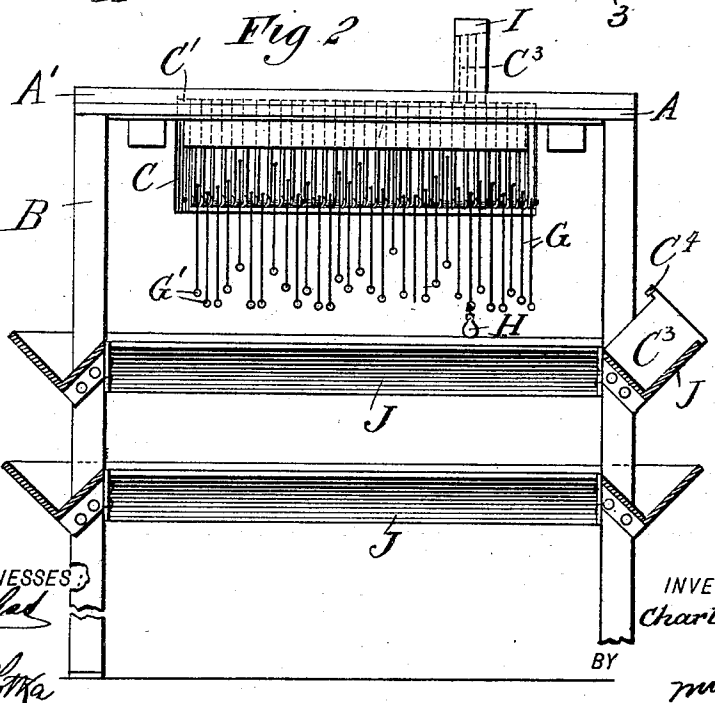


Fig 2



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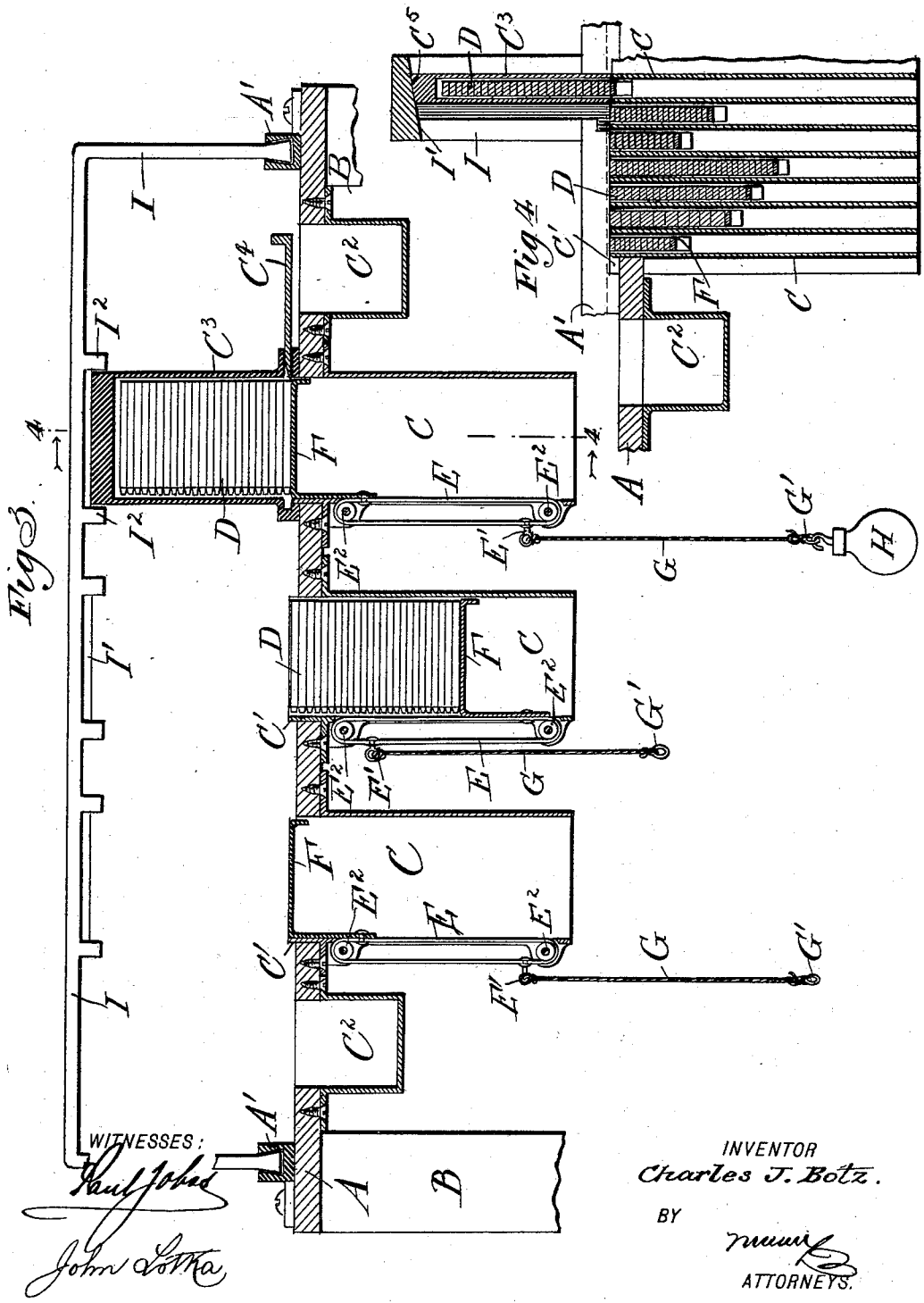
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UNITED STATES PATENT OFFICE.

CHARLES J. BOTZ, OF SEDALIA, MISSOURI, ASSIGNOR OF THREE-TENTHS TO THE BOTZ TYPESETTING MACHINE COMPANY, OF HERMANN, MISSOURI.

TYPE-CASE.

SPECIFICATION forming part of Letters Patent No. 628,442, dated July 11, 1899.

Application filed April 5, 1898. Serial No. 676,534. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. BOTZ, of Sedalia, in the county of Pettis and State of Missouri, have invented new and useful Improvements in Type-Cases, of which the following is a full, clear, and exact description.

My invention relates to mechanism for storing type, and has for its object to provide a device of the above-indicated class which will be simple and of comparatively great capacity.

To this end my invention consists of the features of construction hereinafter described, and pointed out in the appended claims.

I will now proceed to describe my invention with reference to the accompanying drawings, in which—

Figure 1 is a plan of the improved apparatus. Fig. 2 is a front elevation thereof with parts in section. Fig. 3 is a sectional elevation on line 3 3 of Fig. 1, and Fig. 4 is a sectional detail on line 4 4 of Fig. 3.

The apparatus comprises a table A, carried on legs B or other suitable supports and having a series of openings *a* for the reception of type-boxes C, placed obliquely to correspond to the inclination at which types are held when the operator distributes them. The left-hand and forward edges of each box C are raised beyond the top of the table A, as shown at C′, so as to form a stop for the type D when the same is brought over the opening *a*.

The boxes C are rectangular, of a width corresponding to the length of the types, and of a height selected according to the number of types each box is intended to hold. The boxes are open at the top and bottom (although the bottom might be closed) and extend below the table A, as shown best in Figs. 3 and 4. One side of each box is apertured or slitted vertically, and in the slot is arranged one run of an endless apron, belt, or cord E, which runs over pulleys or guides E^2, located adjacent to the ends of the slot. To the inner run of the apron E is secured a movable bottom or follower F, projecting considerably in advance of its connection with the apron, so that the follower in its upper position will be flush with or a little above the table A, as shown in Fig. 3. The outer run of the apron E has a projection E′, which may be used as a handle to move the follower F manually; but I prefer to suspend from said projection E′ a rod, string, or like connection G, formed at its lower end with a loop or other retaining device G′ for a weight H.

In the drawings I have shown three rows of type-boxes C; but it will be understood that their number is immaterial. These boxes are disposed in the central portion of the table, and along the sides are or may be arranged type-boxes C^2, of the ordinary pattern, to hold spaces or other types. Of course the table A will be provided adjacent to the openings *a* with characters or other indications corresponding to the types to be received by the respective boxes.

Along the front and rear edges of the table A are located parallel guides A′, which may be bars having dovetail grooves, as shown, and in said grooves is adapted to slide a frame I, provided, in registry with the (three) rows of openings *a*, with inclines I′, forming wedges, in the manner more fully described hereinafter, said inclines being preferably arranged between lugs I^2 of the frame I.

In conjunction with the boxes C and the frame I, I employ storage-boxes or reserve boxes C^3, which may be placed on racks J, Fig. 2, secured to the legs B below the table A. These storage-boxes are open at one end and this end may be closed by a sliding lid C^4. The opposite end of the box is so shaped as to fit between the lugs I^2 of the frame I and has an inclined surface C^5, (see Fig. 4,) adapted to engage the incline I′ of the frame I, so that the storage-box C^3 may be pressed firmly upon the table A.

The operation of my improved apparatus is as follows: The operator puts the types flatwise into the boxes C, each box receiving types of one kind only. Some of the types are put in the boxes C^2, as hereinbefore described; but my invention does not relate to the particular construction of these boxes C^2. The projection C′, forming a stop, enables the operator to readily insert the types in the boxes C. The follower F is at first in the elevated position shown at the left in Fig. 3. At the introduction of each type D the follower F is depressed correspondingly, friction between the apron or belt E and the pulleys E^2 being sufficient to keep the follower normally stationary. When the follower thus reaches the lowermost position shown for the central

box C in Fig. 3, the box is full, and consequently no further types can be placed therein. By reference to Figs. 2 and 3 it will be seen that the position of the retaining device or attaching device G′ (which moves with the follower, since it is connected thereto by the belt or apron E) will clearly indicate whether the corresponding box C is full or empty or partly filled.

When one of the boxes C is full and there are still types intended for it, I empty the contents of such box C into one of the storage-boxes C^3. For this purpose I remove a storage-box from its rack J and place it over the open upper end of the box C to be emptied. The flange C′ will project into the storage-box, being substantially in contact with the lid C^4. The lid is then opened, (see Fig. 3,) and the frame I is slid from its normal position (at the side of the table A, Fig. 1) until its incline I′ engages the wedge-surface C^5 of the storage-box C^3. The storage-box is thus firmly locked in position by wedge action. The operator then hooks the weight H on the loop or other attaching device G′, thereby causing the follower F to transfer the types D from the box C to the storage-box C^3. The same result might of course be obtained by simply pulling on the string G or on the handle E′. The latter, however, is not readily accessible in its raised position. The parts then being in the position illustrated at the right in Fig. 3, the lid C^4 is pushed in, the frame I is moved out of engagement with the storage-box, and the latter is again placed on the rack J. The box C which has been emptied, as described, is now ready to receive a further supply of type.

It will be seen that the frame I normally is entirely out of the way, so as not to interfere with the operator's movements. The frame may be moved to any desired position relatively to the boxes C to hold a storage-box C^3 against the mouth of any one of said boxes C. The manipulation of the apparatus is exceedingly simple, its capacity is practically unlimited owing to the use of storage-boxes, and type may be distributed with great ease and rapidity.

I desire it to be understood that various modifications may be made without departing from the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A type-case, comprising a table having type-boxes arranged obliquely with reference to the front edge of the table.

2. A type-case, comprising a table having type-boxes arranged obliquely with reference to the front edge of the table, one side of each box projecting upwardly to form a stop for the type.

3. A type-case, comprising a series of type-boxes, one side of each type-box projecting beyond the opposite side to form a stop for the type.

4. A type-case, comprising a series of type-boxes having slotted sides, an endless belt whose inner run is arranged to move in the slotted side of a box, a follower located in the box and secured to the inner run of the belt, and an actuating device connected to the outer run of the belt.

5. A type-case, comprising a series of type-boxes, followers mounted to slide in said boxes, endless belts or aprons extending in the direction of the follower's movement, each follower being secured to one run of the corresponding belt, and an actuating connection secured to and depending from the other run of the belt.

6. A type-case, comprising a series of type-boxes, followers mounted to slide in said boxes, endless belts or aprons extending in the direction of the follower's movement, each follower being secured to one run of the corresponding belt, and an actuating connection secured to and depending from the other run of the belt, said connection having at its lower end an attaching device adapted to hold a weight.

7. A type-case, comprising a table, a series of type-boxes thereon, followers in the type-boxes, means for moving the followers, a frame movable over the table into registry with any one of said type-boxes, and storage-boxes of proper dimension to be received between said frame and the type-boxes and to receive the type discharged by the follower from the corresponding type-box.

8. A type-case, comprising a table, a series of type-boxes thereon, followers in the type-boxes, means for moving the followers, a frame movable over the table into registry with any one of said type-boxes, and storage-boxes of proper dimension to be received between said frame and the type-boxes and to receive the type discharged by the follower from the corresponding type-box, the lower surface of the frame, and the surface of the storage-box adapted to engage said frame-surface, being formed with inclines to wedge the storage-box against the corresponding type-box.

CHARLES J. BOTZ.

Witnesses:
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AUG. J. SCHNEIDER.