

(No Model.)

C. F. HILDER.

APPARATUS FOR PACKING TYPES INTO RECEPTACLES.

No. 540,055.

Patented May 28, 1895.

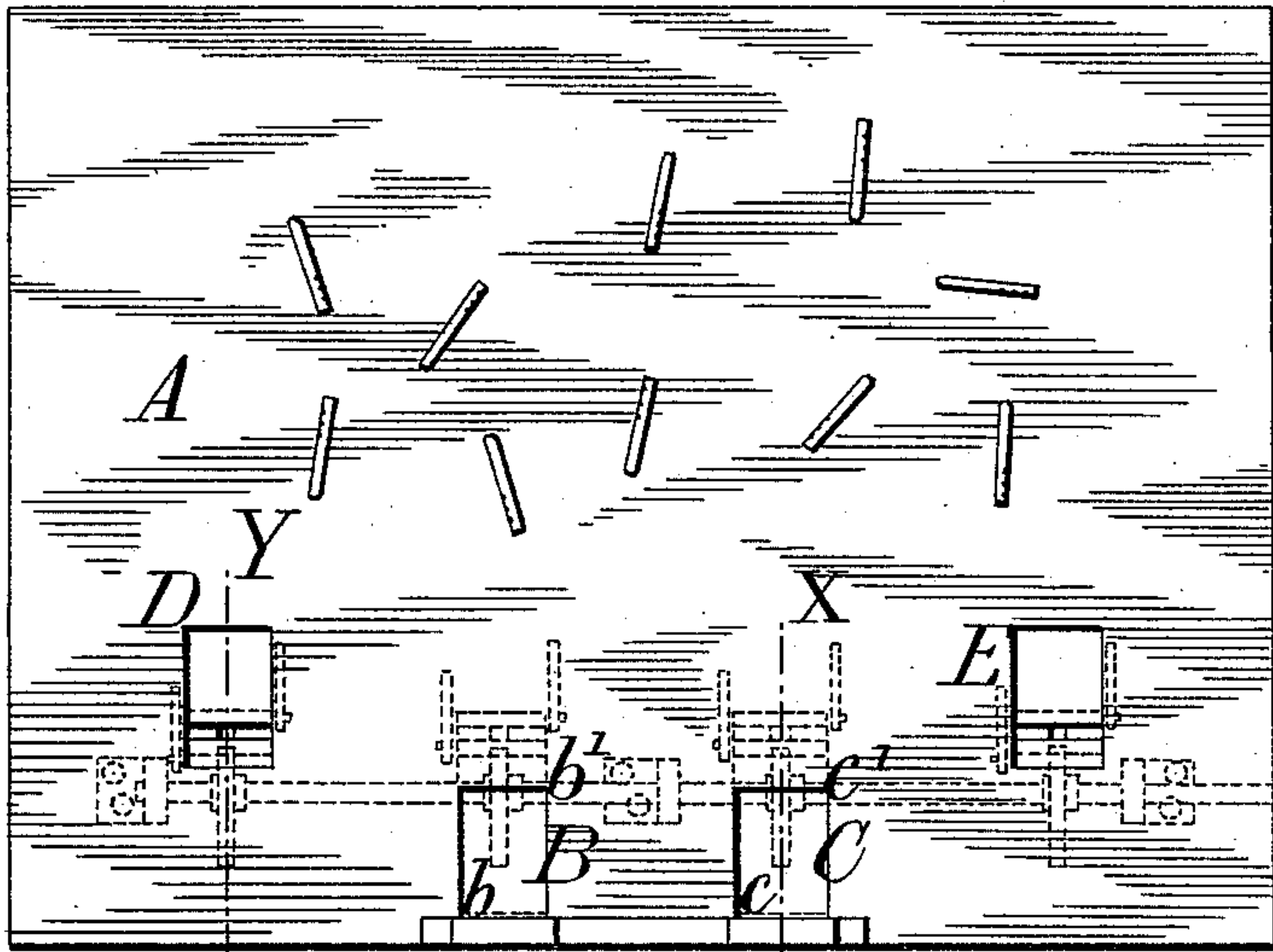
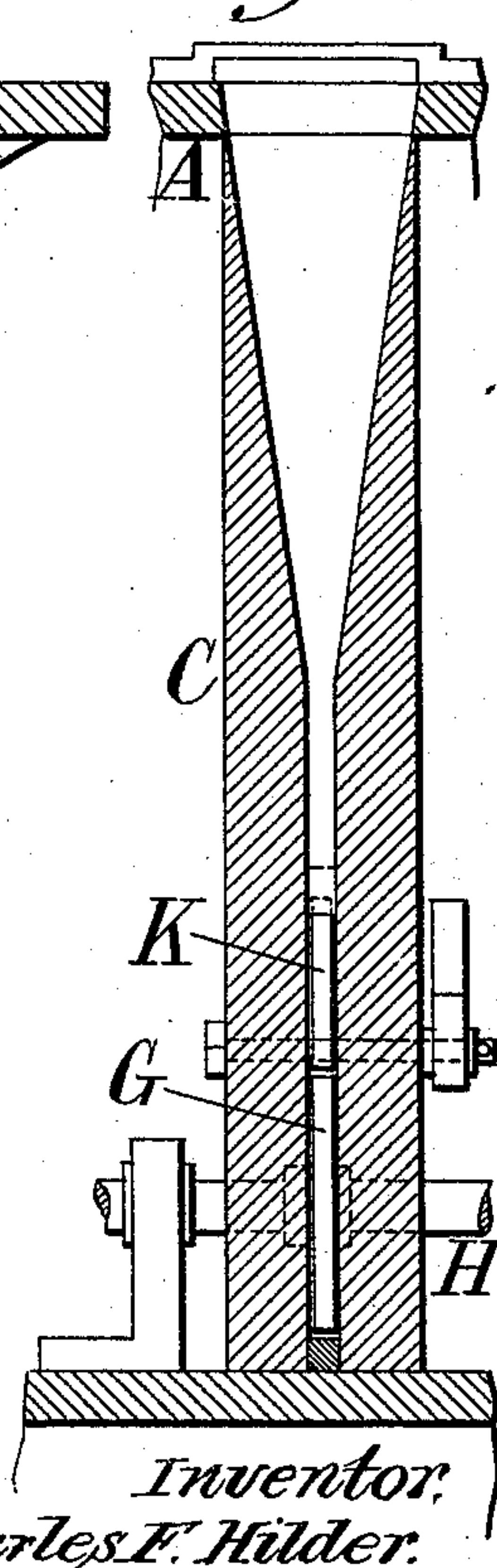
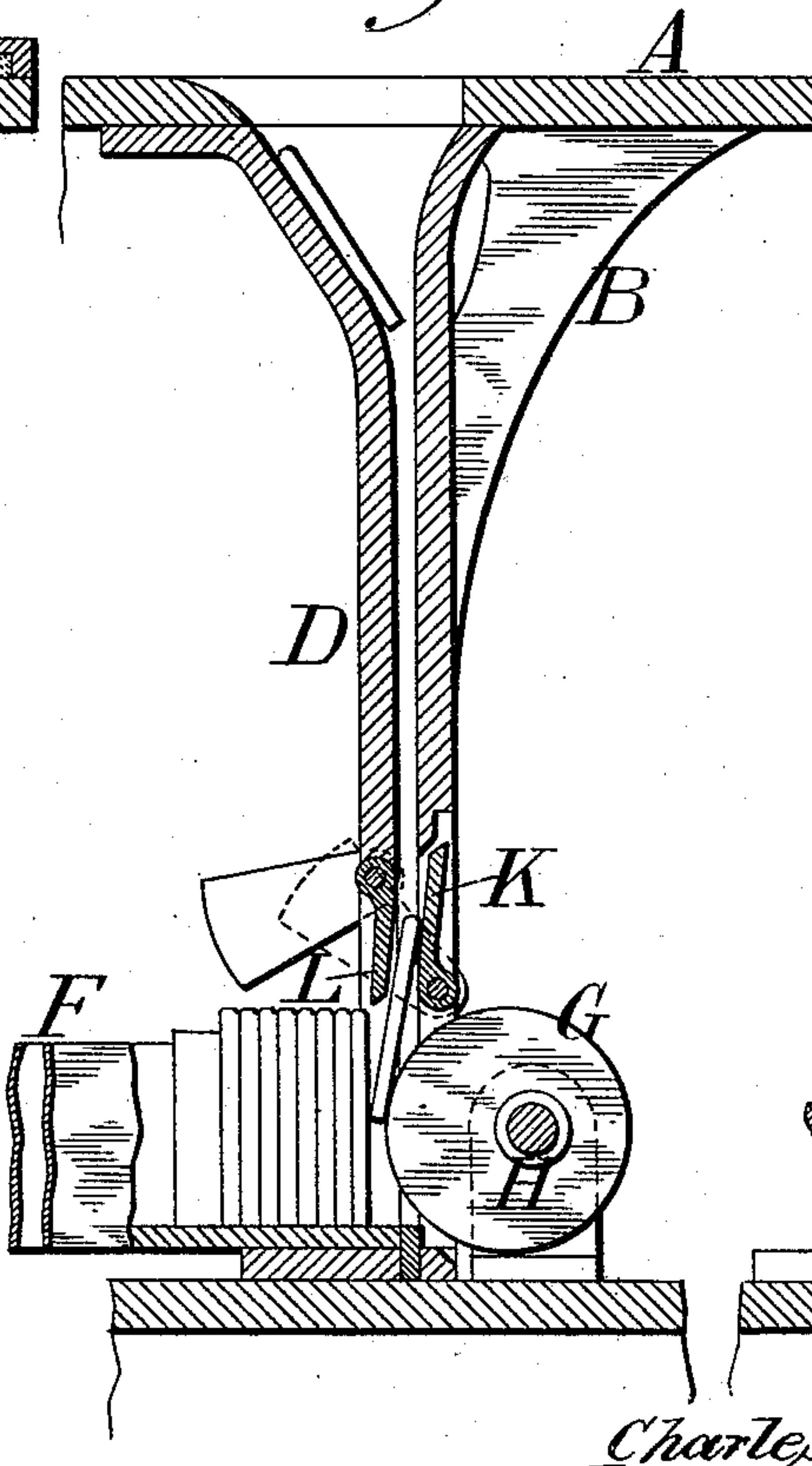
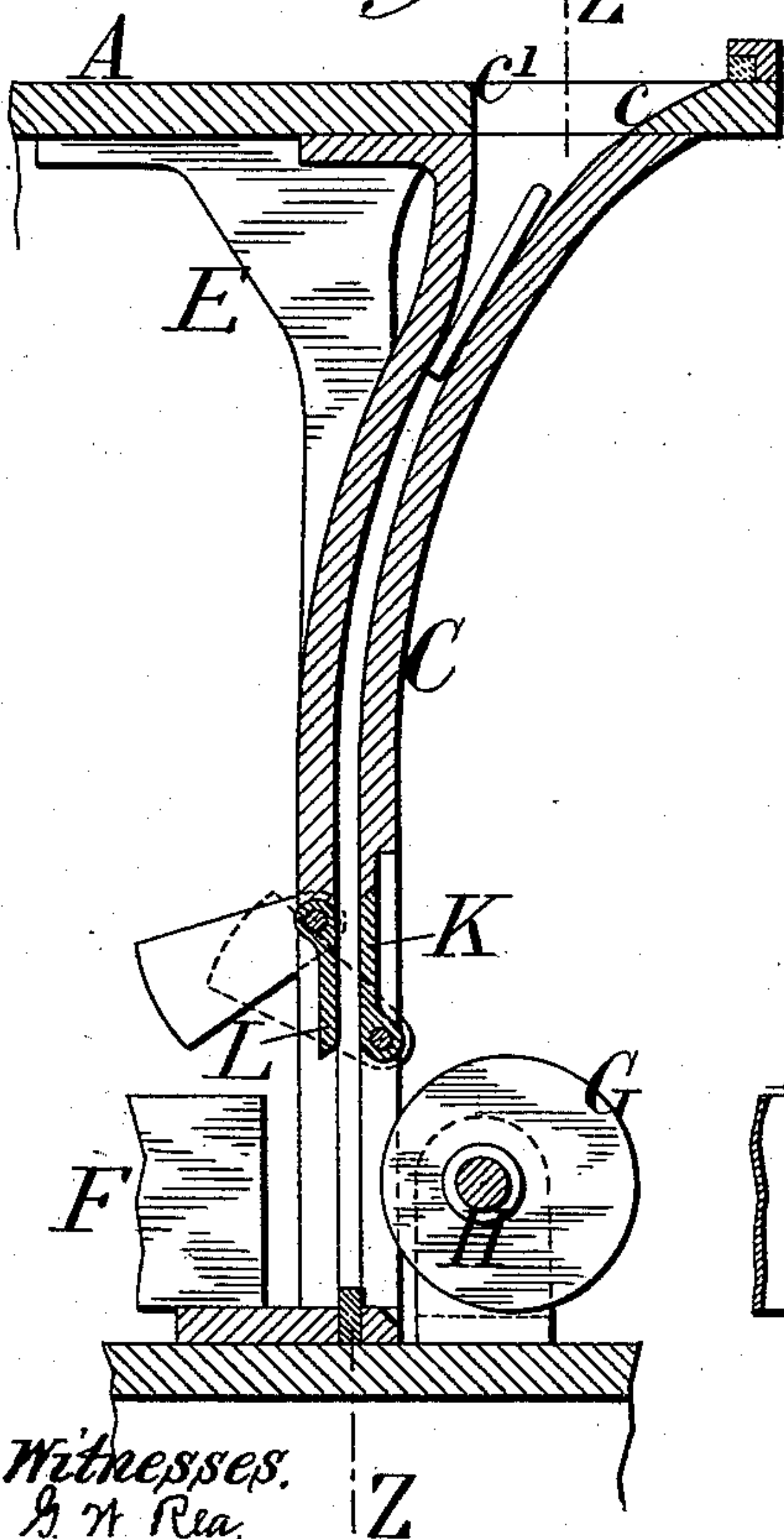


Fig. 1

Fig. 2

Fig. 3

Fig. 4



Witnesses.
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UNITED STATES PATENT OFFICE.

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APPARATUS FOR PACKING TYPES INTO RECEPTACLES.

SPECIFICATION forming part of Letters Patent No. 540,055, dated May 28, 1895.

Application filed January 10, 1895. Serial No. 534,485. (No model.)

To all whom it may concern:

Be it known that I, CHARLES FREDERICK HILDER, a citizen of England, residing at Brompton House, Hampton, London, in the county of Middlesex, England, have invented certain new and useful Apparatus for Packing Types into Receptacles, of which the following is a specification.

When a printing form is distributed into groups each group containing the types of one character only, it is necessary that in packing them into receptacles for use in a type setting machine, all the types should stand in the receptacle with their character ends all facing one way and their nicks all presented toward one side.

My invention relates to apparatus for facilitating manipulation in packing types into receptacles so as to comply with these conditions, as I shall describe, referring to the accompanying drawings.

Figure 1 is a plan of the table on which are laid the types, all of one character, that are to be packed. Figs. 2 and 3 are vertical sections, to an enlarged scale, taken respectively on the lines X X and Y Y of Fig. 1. Fig. 4 is a section on the line Z Z of Fig. 2.

A is a smooth table having at the side where the operator stands four chutes, namely, two middle chutes B and C each of the form shown in section in Fig. 2 and two outer chutes D and E each of the form shown in section in Fig. 3. Each chute leads down to the end of a receptacle in form of a trough, at the end of which there is an eccentric G caused to rotate continuously by any convenient motor driving the spindle H on which the four eccentrics are fixed one for each chute. The spindle H revolves in bearings provided on the base plate J, on which the receptacles F rest. At its lower part, each chute has a front and a back opening each provided with a door, the front door K hinged at its lower edge, and the hind door L hinged at its upper edge. Each door is held closed by a small weight on its hinge pin or it might be by a light spring, so that it can open yielding to a slight force.

The apparatus is worked as follows: The operator putting his finger on one of the types laid upon the table A, and turning it, if necessary, on one of its flat sides, notices or feels which of four possible positions the type oc-

cupies. If the character is directed toward him and the nicks are on the left side, he draws the type to the left middle chute B and lets it drop. If the character is toward him and the nicks on the right side he draws the type to the right middle chute C and lets it drop. In both these cases the character end of the type rests for a moment on the incline *b* or *c* allowing the other end, after passing the edge *b'* or *c'* to descend first, the type thus descends bottom first with the character presented upward. When the character is away from the operator and the nicks on the left, he draws the type to the left outer chute D. When the character is away from him and the nicks on the right he draws it to the right outer chute E. Thus, in all cases, the types descend with the characters presented upward, but a number descend by the chutes B and D with their nicks to the left, and a number by C and E with their nicks toward the right. As each type reaches the lower end of the chute behind the eccentric it is pushed by the eccentric into the receptacle. Should the eccentric happen to bear against it when it has not reached the bottom it would be canted to the side as shown in Fig. 3, and in that case the doors K L open to allow it to take the inclined position. On the retreat of the eccentric, the type is restored to its vertical position by the closing of the doors K L and descends to the bottom to be pushed into the receptacle by the next revolution of the eccentric. As one pair of the receptacles F contains types with their nicks on the hand opposite to that of the nicks in the other pair, the receptacles of the one or the other pair have to be turned end for end when placed in a type setting machine, and thus the types in the receptacles all have their characters and nicks lying one way as is necessary in such machines.

Having thus described the nature of my said invention and the best means I know of carrying the same into practical effect, I claim—

1. The combination of a table provided with a pair of left hand and a pair of right hand depending chutes, a receptacle arranged in operative connection with the lower end of each chute, a pair of self-closing doors near the lower end of each chute, and a rotating eccentric mounted at the lower end portion of each chute, substantially as described.

2. In apparatus for packing types into receptacles, in combination with the table for manipulating the types and the chutes leading down therefrom to receptacles furnished
5 with eccentrics, a pair of doors near the lower end of each chute, urged to close by weights or springs, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of December, A. D. 1894.

CHARLES F. HILDER.

Witnesses:

T. F. BARNES,
THOMAS LAKE.