

(No Model.)

C. F. HILDER.
TYPE DISTRIBUTING APPARATUS.

No. 531,531.

Patented Dec. 25, 1894.

Fig. 1

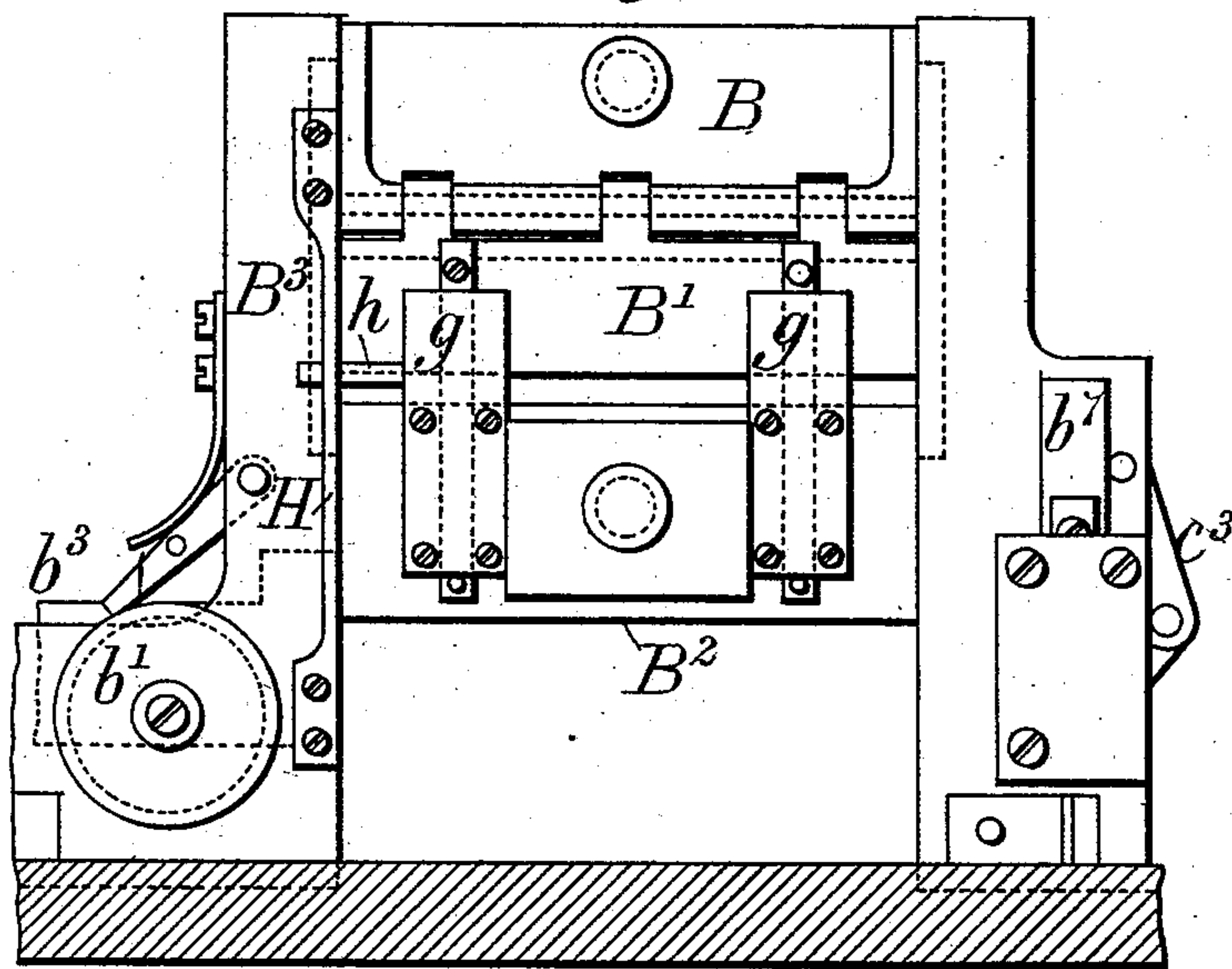


Fig. 2

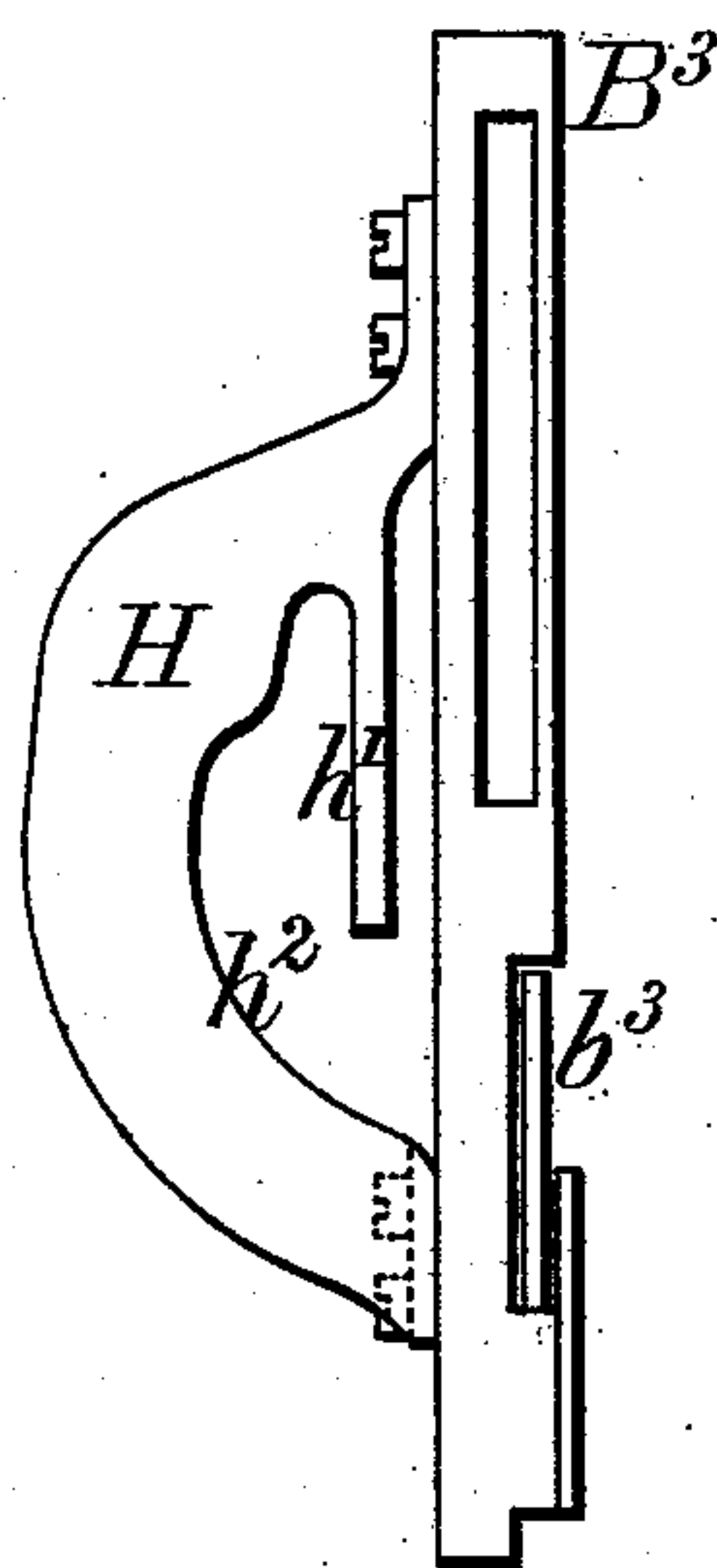


Fig. 3

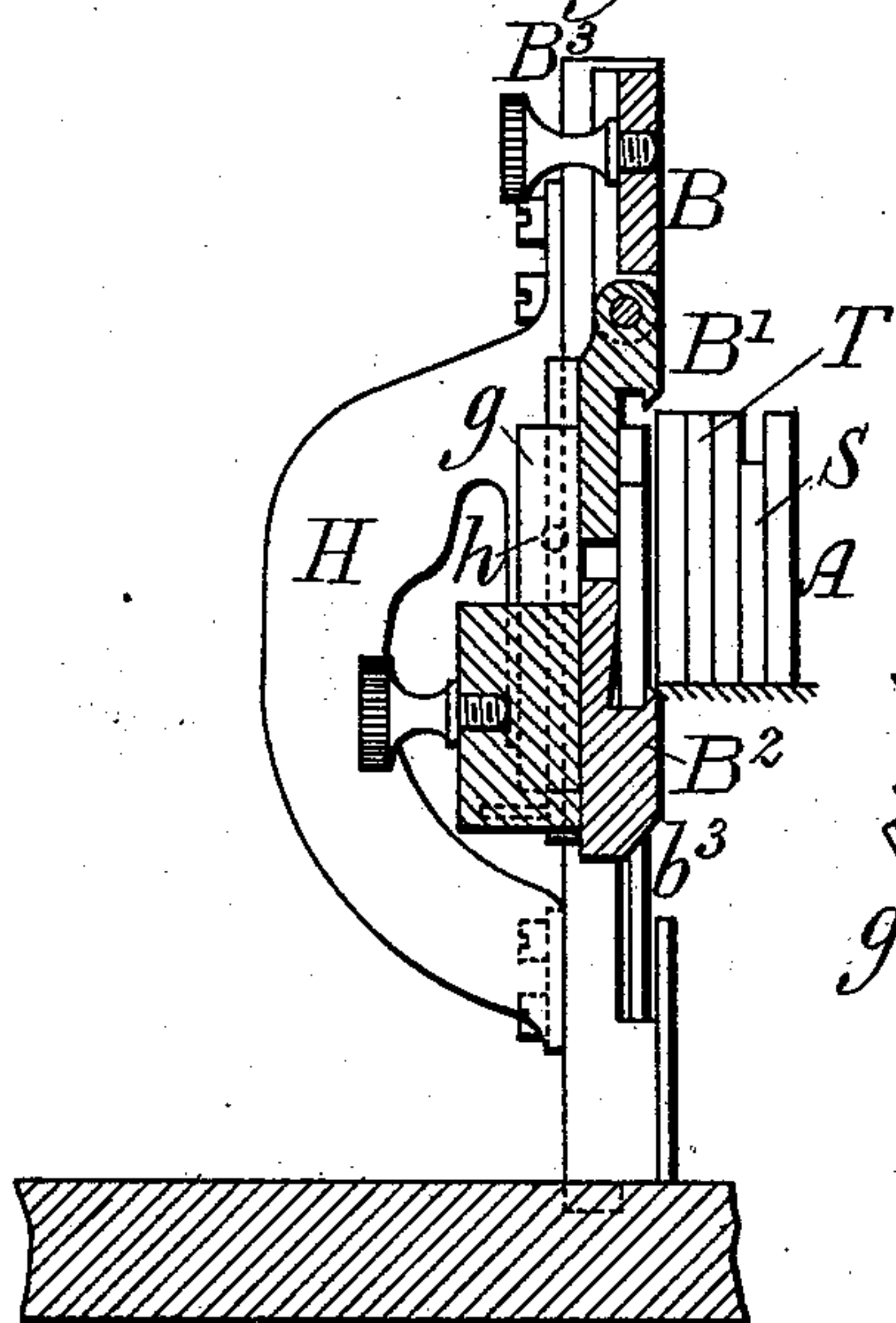
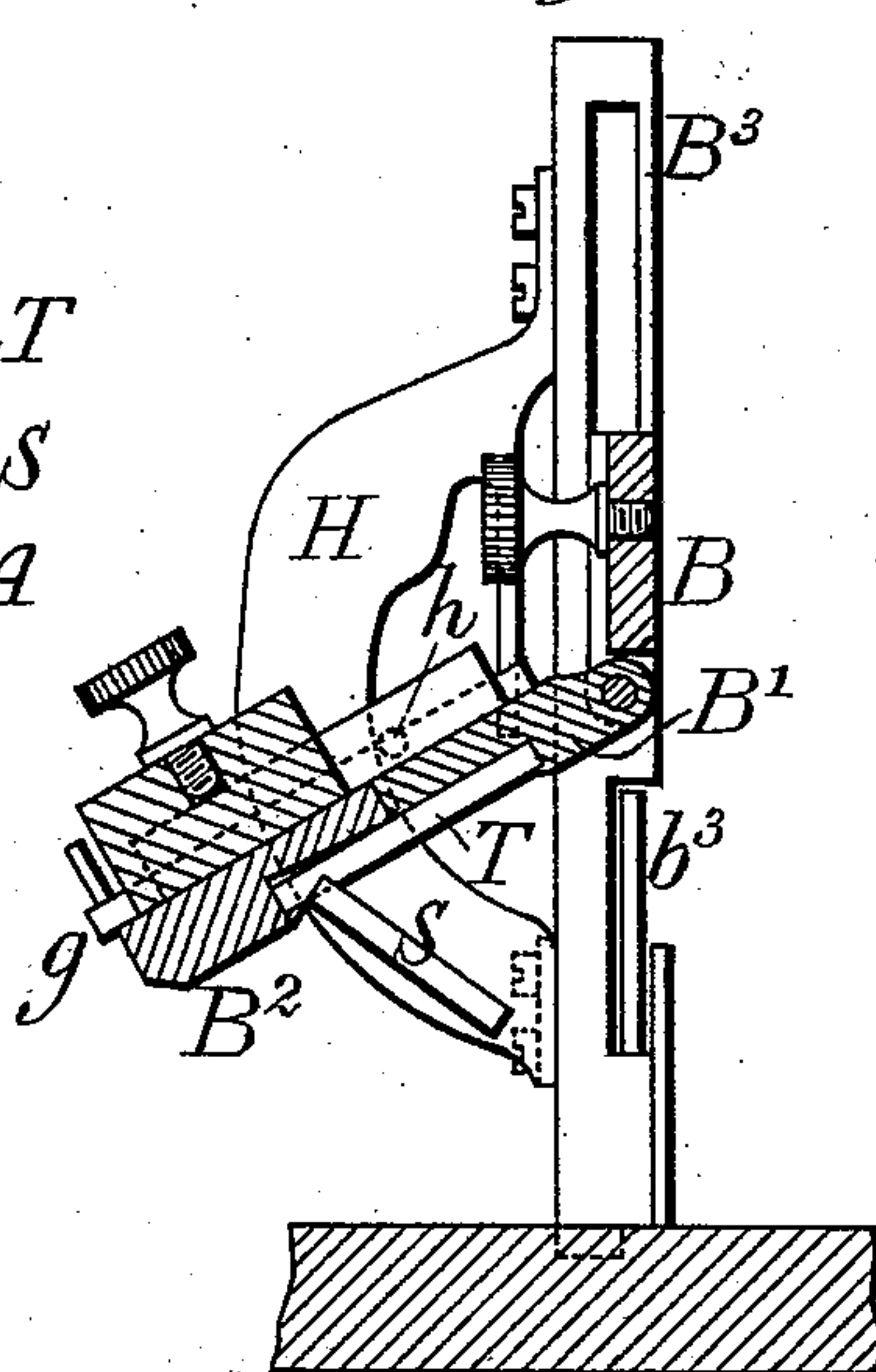


Fig. 4



Witnesses:

G. W. Rea
Robert Emmett

Inventor:
Charles F. Hilder,
By James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

CHARLES F. HILDER, OF LONDON, ENGLAND.

TYPE-DISTRIBUTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 531,531, dated December 25, 1894.

Application filed June 19, 1894. Serial No. 515,038. (No model.) Patented in England July 29, 1893, No. 14,624.

To all whom it may concern:

Be it known that I, CHARLES FREDERICK HILDER, a citizen of England, residing at 28 Gray's Inn Chambers, Holborn, London, England, have invented a new and useful Improvement in Type-Distributing Apparatus, (for which I have obtained Letters Patent in Great Britain, No. 14,624, dated July 29, 1893,) of which the following is a specification.

In the specification to my patent dated April 3, 1894, No. 517,802, describing apparatus for distributing types, I provided for separation of space types by removing a lower stop from the end of a separated line of types and so allowing space types to be pushed out under an upper stop which prevents the higher character types from being pushed out. According to my present invention I dispense with this arrangement of stops and with the key for working the lower stop, and I effect the separation of the space types as I shall describe referring to the accompanying drawings.

Figure 1 is an enlarged view of the gate B and adjoining parts shown in Fig. 1 of the specification No. 517,802 above referred to, with modifications according to my present invention. Fig. 2 is a side view of the vertical guide B³ on the left of the gate. Fig. 3 is a transverse section of the gate B in its raised position, and Fig. 4 is a transverse section when the gate is lowered and folded on its hinge to deliver space types.

I make the gate in three parts in height, the uppermost part B having hinged to it the two lower parts B' B² which are connected together by slides and guides *g* so that they can be slid a little apart from each other as shown in Figs. 1 and 3 or slide close together as shown in Fig. 4. In these two parts B' B² is formed the recess into which, as described in the previous specification is pushed the foremost line of the form A that is to be broken up. The top and bottom of the recess are undercut, as shown, behind projecting lips which are sloped in front.

When the gate is raised, as shown in Fig. 3, the part B² is separated from B' so that the distance between the lips is a little more than type height, allowing the types to enter the recess, in which they drop till they rest on its

bottom. With the character types T, the space types S, which happen to be in the line, also enter the recess.

When the gate is lowered, so that the part B² rests on the bottom plate the two parts B' B² are brought close together and then folded back on their hinge as shown in Fig. 4. The character types T being held at the top and the bottom remain in the recess, but the shorter space types S, not being held at the top, fall out. After they have fallen, the parts B' B² are moved back to their vertical position, and then the character types remaining in the recess are separated into their respective cases by the action of finger keys as described in my previous specification.

In order to prevent the parts B' B² from separating while they are inclined to drop the space types, I fix on the side guide B³ a shield H and to one of the guides *g* I attach a pin *h* which when the gate is raised and lowered vertically travels along a straight path *h'* formed in the shield H, and, when the lower parts of the gate are folded back as in Fig. 4, this pin travels along the curve *h²* which is the arc of a circle struck from the axis of the hinge as a center.

In Fig. 1 of my previous specification the pulley *b'* carrying the weighted cord for actuating the pusher *b³*, was shown to the right of the gate. According to my new arrangement, I place it to the left of the gate, where it can be more easily accommodated clear of the type separating mechanism.

As the forms to be distributed may be of various widths, I prefer to make the gate B sufficiently wide to receive the longest line of type that is to be pushed into its recess, with a little freedom so that they are not tightly packed therein. For a line of less length, a side piece may be fixed at the left hand end of the recess so as to allow between it and the right hand end a little more than the length of the line.

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

In a type distributing apparatus, the combination with the upper gate section B, of the lower gate section B' hinged thereto and pro-

vided with a slidable section B², the lower section and the slidable section having lipped recesses to receive a type, and means whereby the slidable section is moved to hold and re-
5 tain character types only, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification, in the presence of

two subscribing witnesses, this 6th day of June, A. D. 1894.

CHARLES F. HILDER.

Witnesses:

GEO. J. B. FRANKLIN,

WALTER J. KERTEN,

Both of 17 Gracechurch Street, London, E. C.