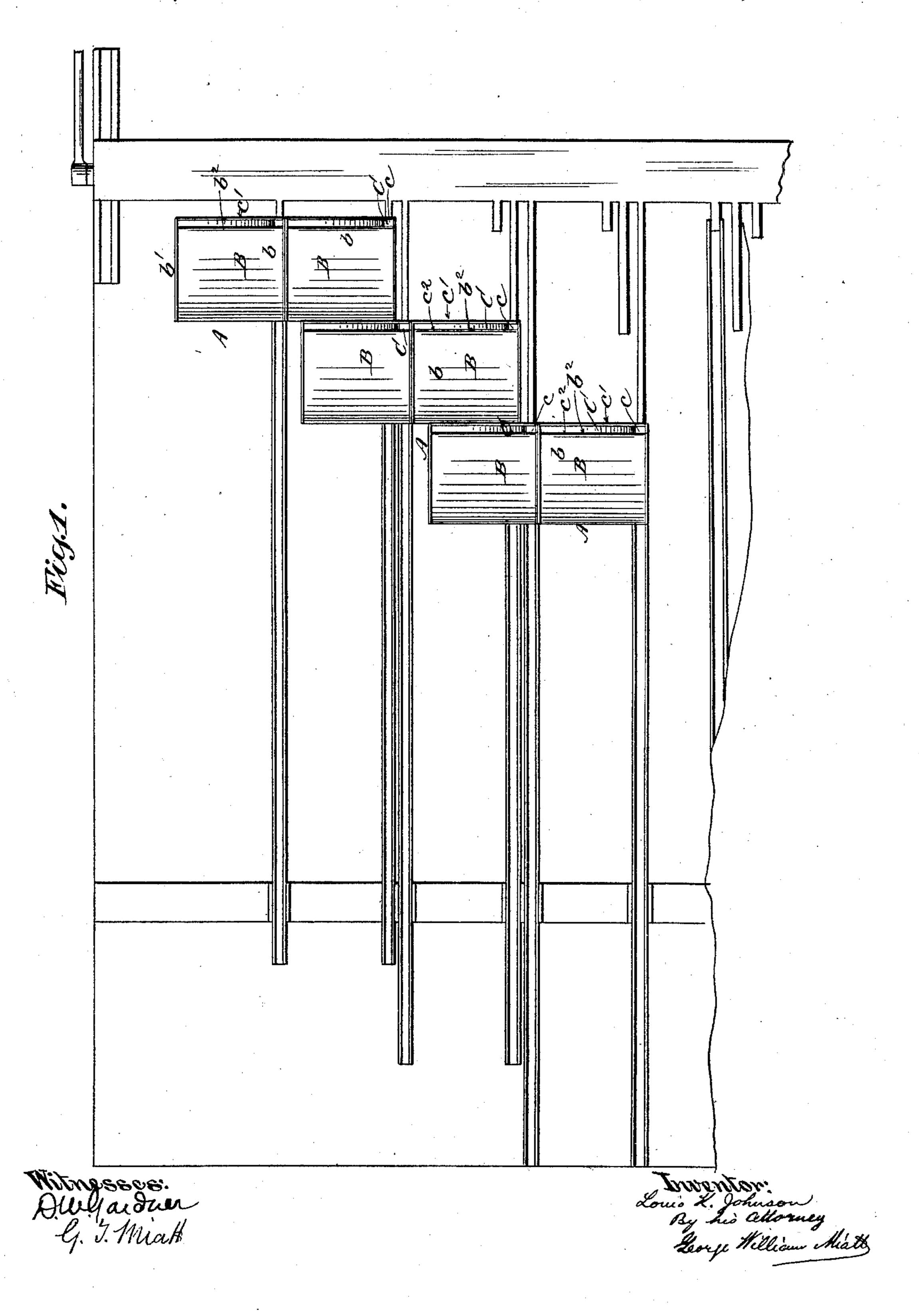
## L. K. JOHNSON. TYPE DISTRIBUTING APPARATUS.

No. 477,009.

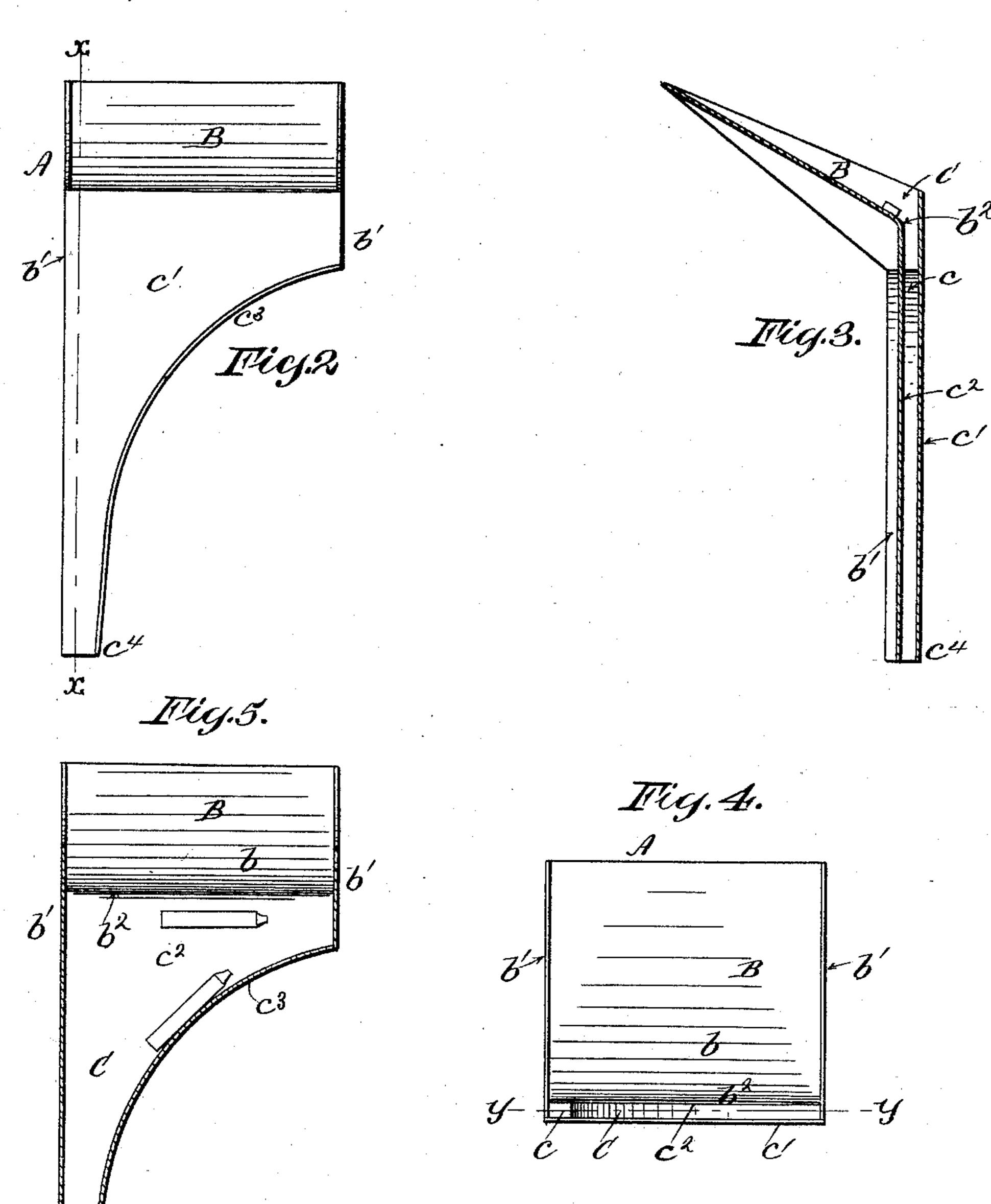
Patented June 14, 1892.



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Witnesses: Owyandrier G. J. Mich

Louis & Johnson
By his attorney
Leorge William Mitte

## United States Patent Office.

LOUIS K. JOHNSON, OF BROOKLYN, ASSIGNOR TO THE ALDEN TYPE MACHINE COMPANY, OF NEW YORK, N. Y.

## TYPE-DISTRIBUTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 477,009, dated June 14, 1892.

Application filed May 2, 1891. Serial No. 391,403. (No model.)

To all whom it may concern:

Be it known that I, Louis K. Johnson, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and 5 State of New York, have invented certain new and useful Improvements in Type-Distributing Apparatus, of which the following is a description sufficient to enable others skilled in the art to which the invention appertains to make and use the same

My improvements relate to the class of apparatus in which the types are distributed by hand into receivers or cups by which they are conducted in prescribed positions into type-containing channels for use in the set-

ting case or apparatus.

The object of my invention is to insure the descent of the types upon their narrow sides and their introduction into the containing-channels feet first.

The invention consists in a receiver having an inclined receiving-surface of greater width than the length of the type, combined with a conduit extending from the lower edge 25 of said receiving plate or surface at an angle thereto, the conduit being so formed that the types can only enter and descend edge first. and having a converging surface which gradually turns the types so that they finally enter 30 the type-containing channels feet first. By this means the types are all deposited in their containing-channels in prescribed relation to each other, since in distribution by hand the types are always thrown or dropped from 35 the fingers with their heads in one direction, corresponding in my improved receiver to the side of the conduit on which the converging surface is situated.

In the accompanying drawings, Figure 1 is a plan of a portion of a distributing apparatus, illustrating diagrammatically a practical utilization of my improved form of receiver. Fig. 2 is a front elevation of a single receiver; Fig. 3, a vertical section upon plane of line at a x, Fig. 2. Fig. 4 is a top view of the receiver; Fig. 5, a vertical section upon plane of line y y, Fig. 4.

The receiver A consists of the receiver or cup B and the conduit C. The receiving

plate or floor b of the cup is inclined at a 50 suitable angle, sufficient to insure the gentle descent of the types when dropped thereon toward the mouth c of the conduit C. The receiving-plate is preferably rectangular in shape, although not necessarily so, and inshape, although not necessarily so, and insloved on two sides by the walls or flanges b' b'. It is of greater width transversely than the length of the types and its lower edge is preferably substantially horizontal.

The broad side walls c'  $c^2$  of the conduit C 60 are separated only a sufficient distance to accommodate the thickness of the types between them, and as the front wall c' extends upward above the lower edge  $b^2$  of the receiving-plate B it will be seen that the types will 65 thus be compelled to enter the mouth c edgewise and substantially parallel in position to

the said lower edge  $b^2$ .

In falling through the channel c the bodies of the type encounter the converging side 70 wall  $c^3$ , which may be either curved or inclined and by which they are gradually turned as they descend until they leave the bottom  $c^4$  of the conduit feet first. The converging side wall  $c^3$  is arranged upon the side 75 of the conduit C, corresponding to that side of the receiving-plate B, toward which the heads of the types are ordinarily and naturally dropped during hand distribution, so that it will be seen that my improved resorted a positive means of arranging the types in the channels all in the same position with relation to each other.

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

In type-distributing apparatus substantially such as described, a type-receiver consisting of a wide inclined receiving-plate and a converging type-conduit arranged at an obtuse angle thereto, the lower edge of said receiving-plate at its juncture with the conduit being substantially horizontal, for the purpose and substantially in the manner described.

LOUIS K. JOHNSON.

Witnesses:

D. W. GARDNER, GEORGE WILLIAM MIATT.