

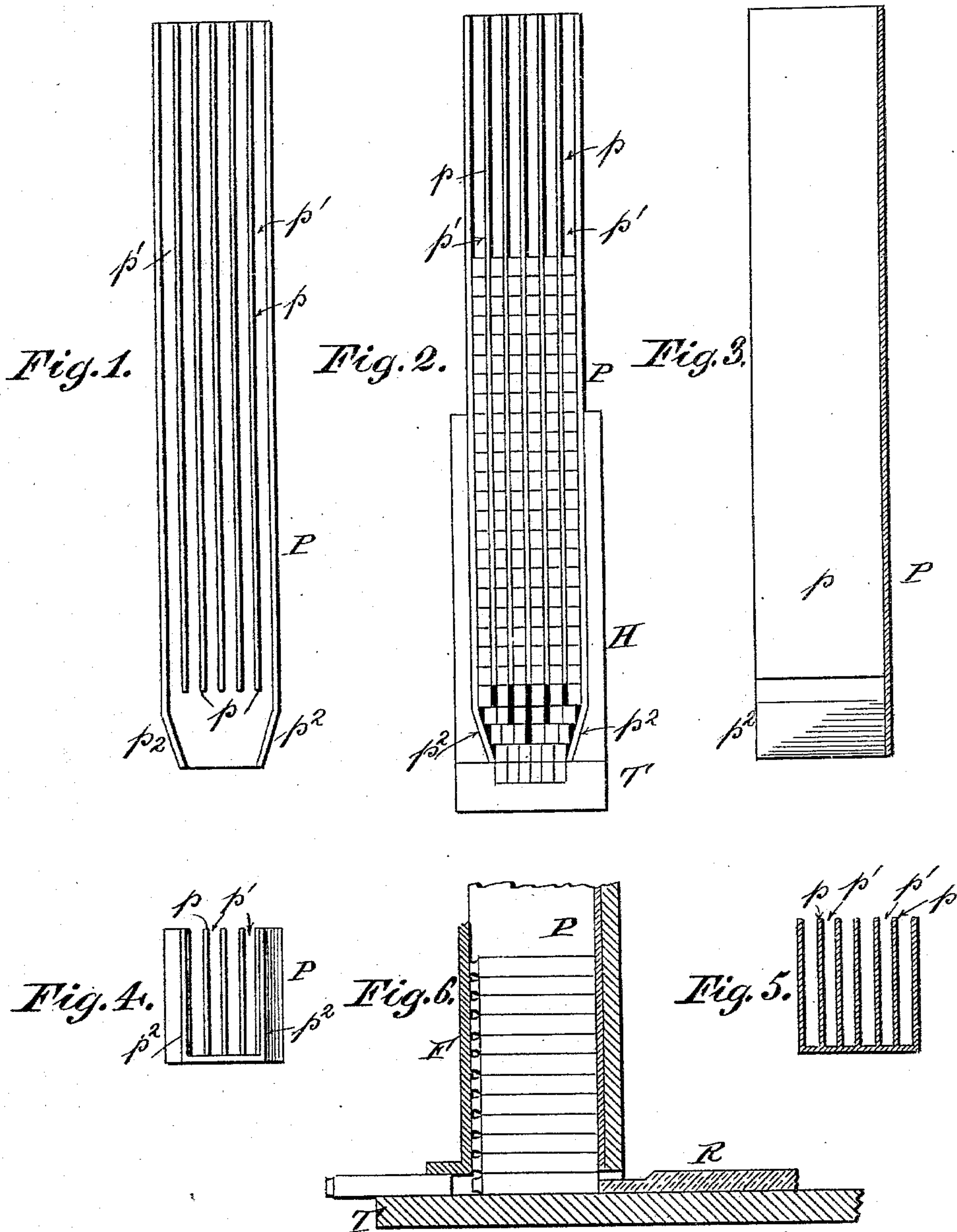
(No Model.)

2 Sheets—Sheet 1.

L. K. JOHNSON & A. A. LOW.
TYPE CONTAINING CHANNEL.

No. 551,386.

Patented Dec. 17, 1895.



Witnesses:
C. Miatt
D. W. Gardner

Inventors:
Louis Rossuth Johnson
Abbot Augustus Low
By their Attorney
George William Miatt

(No Model.)

2 Sheets—Sheet 2.

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Fig. 8.

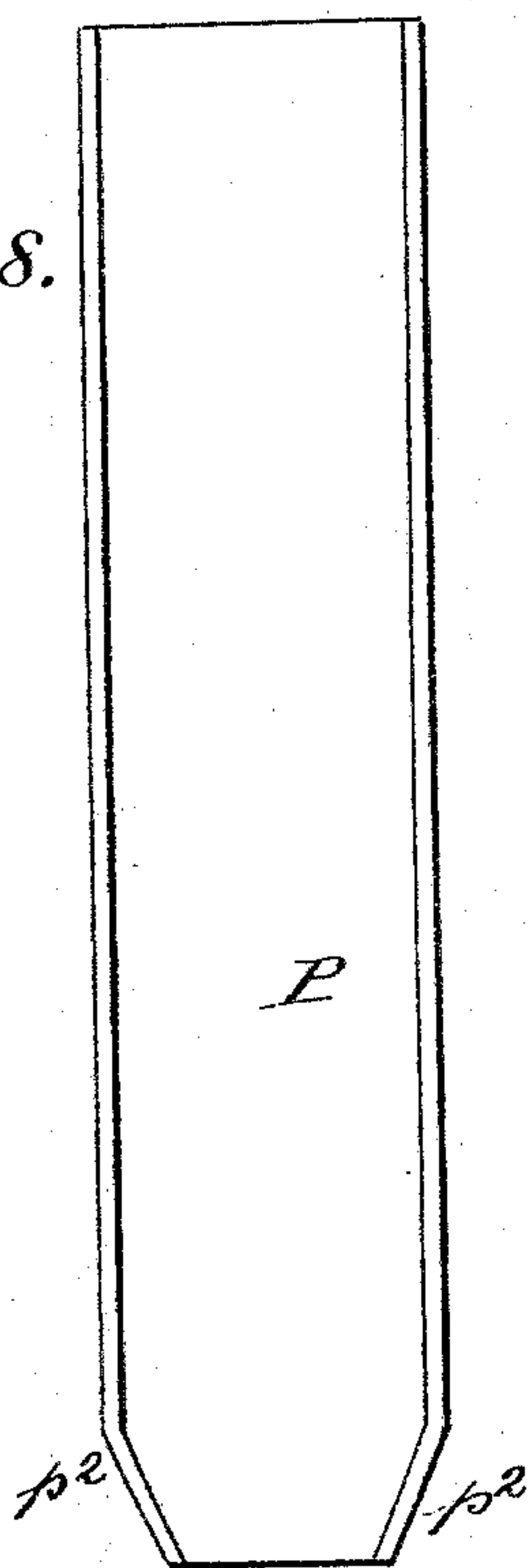


Fig. 7.

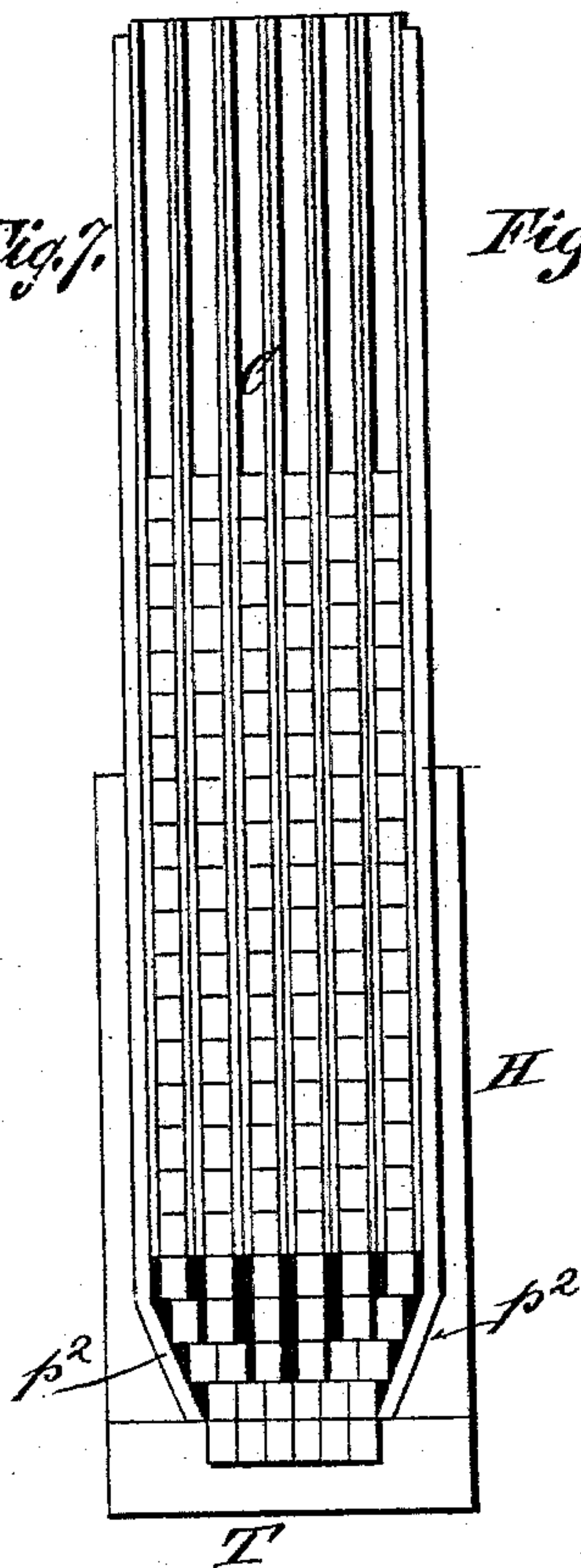


Fig. 9.

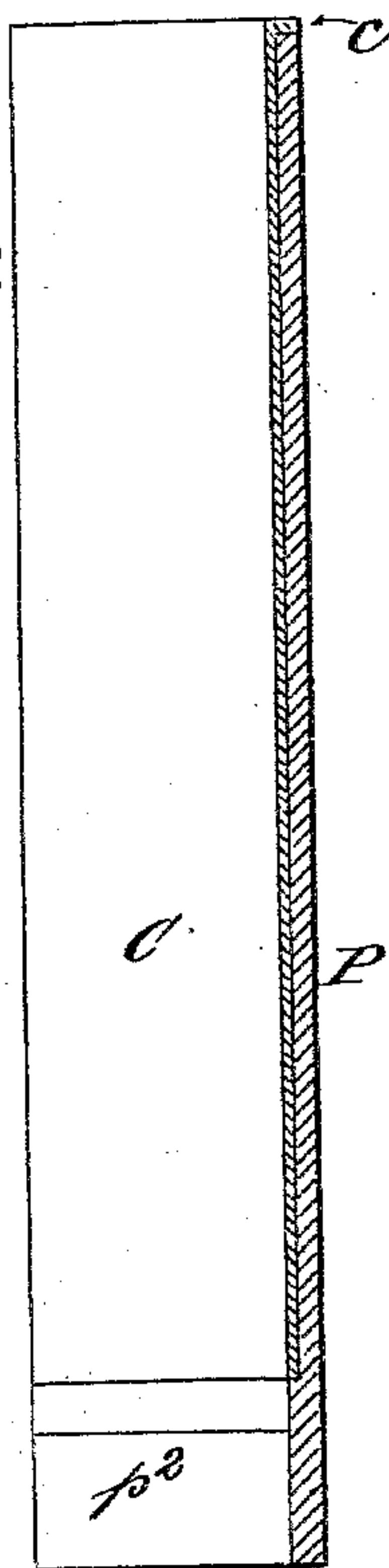


Fig. 10.

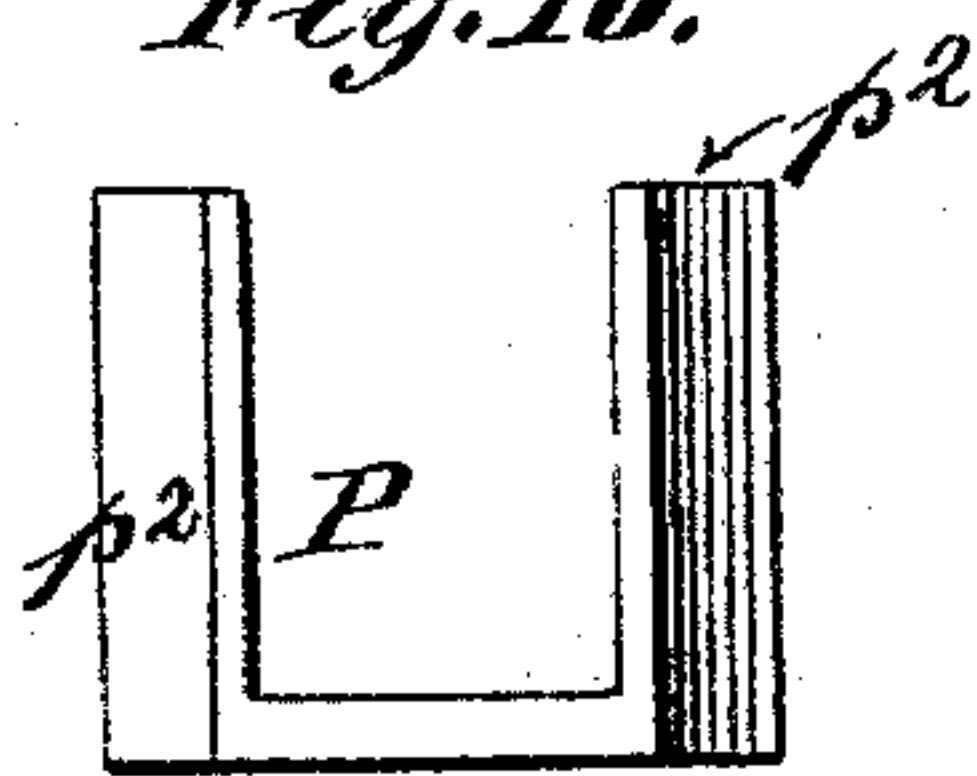
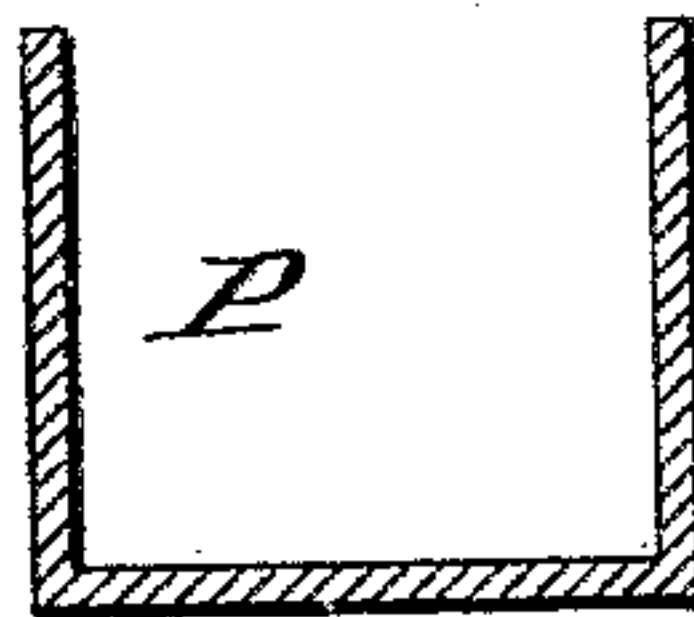


Fig. 11.



Witnesses:
E. Matt
D. W. Gardner

Inventors:
Louis Rossuth Johnson,
Abbot Augustus Low
By their Attorney
George William Mott

UNITED STATES PATENT OFFICE.

LOUIS KOSSUTH JOHNSON AND ABBOT AUGUSTUS LOW, OF BROOKLYN, AS-
SIGNORS TO THE ALDEN TYPE MACHINE COMPANY, OF NEW YORK, N. Y.

TYPE-CONTAINING CHANNEL.

SPECIFICATION forming part of Letters Patent No. 551,386, dated December 17, 1895.

Application filed April 24, 1895. Serial No. 546,988. (No model.)

To all whom it may concern:

Be it known that we, LOUIS KOSSUTH JOHNSON and ABBOT AUGUSTUS LOW, citizens of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Containing Channels, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

Our invention relates to type-containing channels designed to hold a plurality of types representing a word or other combination of letters or characters which are to be forwarded and presented for removal simultaneously in composition, as heretofore provided for by us.

In Patent No. 534,439, issued to Louis K. Johnson, February 19, 1895, a plural type-containing channel is shown in which the types rest side by side against each other. The charging of such a plural channel, while practicable, requires special care and skill, and we have devised our present channel and method of handling to facilitate and simplify the loading of the channel.

Our invention consists, essentially, of a broad channel for the accommodation of a plurality of types or characters, provided with a series of walls or partitions which separate the columns one from the other excepting at the lower end of the common channel, where they pass below the partitions and are brought together centrally to compensate for the thickness of the said partitions by the converging surfaces of the lower side walls of said common channel. In reality, the main feature of distinction is the provision of the common plural channel with these lower converging side walls, since the partitions may consist of the side walls of ordinary single character type-containing channels, each holding a column of type of a prescribed denomination. The partitions may, however, form permanent parts of the plural channel, and in either case the side walls or partitions, by separating the types laterally until the lower end of the common channel is reached, facilitate distribution and insure the proper

relative arrangement of the types within the common channel.

In the accompanying drawings, Figure 1 is a front view of our improved channel formed with permanent partitions; Fig. 2, a similar view showing the channel supported and partially filled with types; Fig. 3, a longitudinal section of the channel; Fig. 4, an elevation of the lower end of the channel; Fig. 5, a transverse section of the channel; Fig. 6, a vertical section of the lower end of the channel, the channel-support, front plate, and type-forwarder being shown symbolically; Fig. 7, a front view of the channel supported, in which the side walls of the ordinary type-containing channels constitute the partitions for the separation of the types; Fig. 8, a front view of the channel without partitions; Fig. 9, a longitudinal section of the plural channel and an ordinary single type-containing channel situated therein; Fig. 10, a view of the lower end of the channel without partitions; Fig. 11, a transverse section of the same.

The types are preferably and economically distributed automatically, one at a time, into single channels or passages. The ordinary individual movable type-containing channels C may be dispensed with by forming the plural channel P with the partitions *p*, which subdivide the channel into a series of grooves or passages *p'*, into which the proper lines may be successively distributed or transferred by suitable mechanism, which it is not necessary to show or describe herein. One method and apparatus suitable for use in connection with our improved plural channel is set forth in our concurrent application, Serial No. 544,230, filed April 3, 1895.

Where the type-containing channels C are used, they are suspended or otherwise supported in the plural channel P by suitable means, as by the shoulders *c*, at their upper ends, which rest upon the upper rear edge of the channel P. The lower side walls *p² p²* of the channel converge together centrally to a width equal to the aggregate thickness of a lateral line of types. In other words, the degree of convergence is sufficient to compensate for the thickness of the partitions *p*, or of the sides of the type-containing channel

when used. The types, after leaving the lower ends of the partitions or channel side walls, naturally conform to the centralizing action of the inclined walls $p^2 p^3$, and pass out from between them in close order.

The channel P is supported in a holder H in any convenient manner, the types resting on the platform T being sustained in front by a front plate F and forwarded into position for removal by a reciprocating pusher R or equivalent means.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of a channel for containing two or more columns of type said channel being formed with converging lower side walls, a channel holder for supporting said plural channel with its lower extremity above a type floor common to all the types,

said common type floor, and means for forwarding the lowest types, substantially in the manner and for the purpose described.

2. The combination of a channel for containing two or more columns of type formed with a series of partitions for separating the columns of type and with converging lower side walls, a channel holder for supporting said plural channel with its lower extremity above a type floor common to all the types, said common type floor, and means for forwarding the lowest types, substantially in the manner and for the purpose described.

LOUIS KOSSUTH JOHNSON.
ABBOT AUGUSTUS LOW.

Witnesses:

GEORGE WILLIAM MIATT,
D. W. GARDNER.