

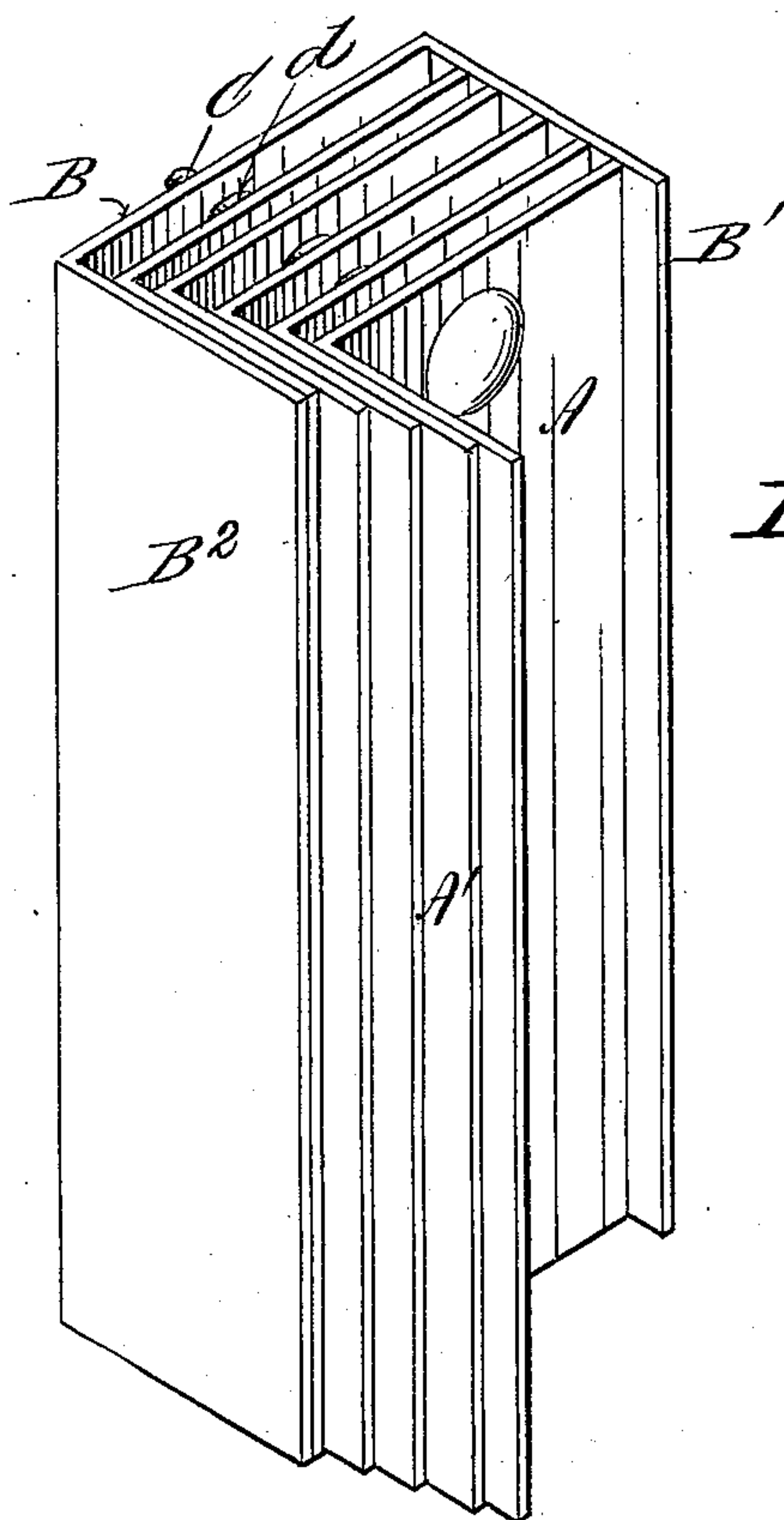
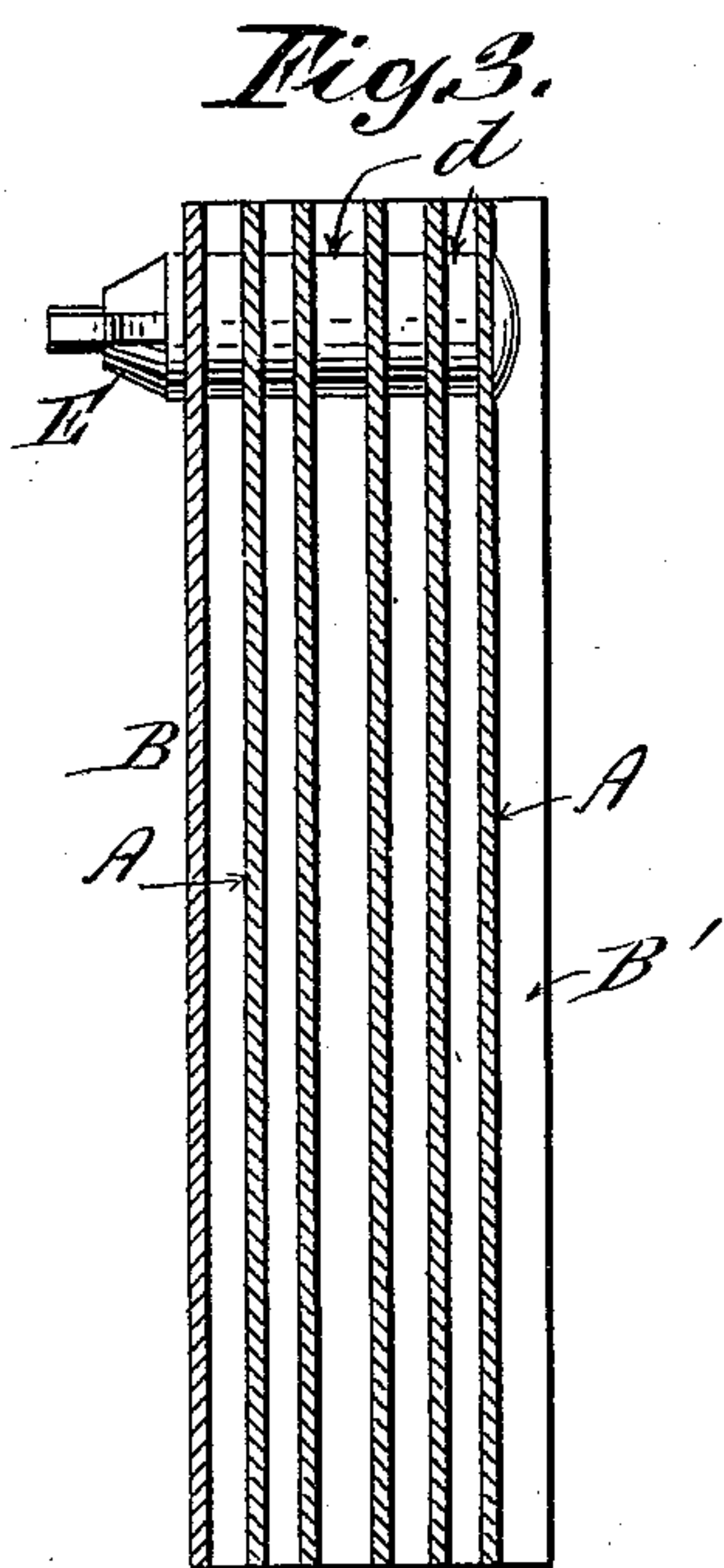
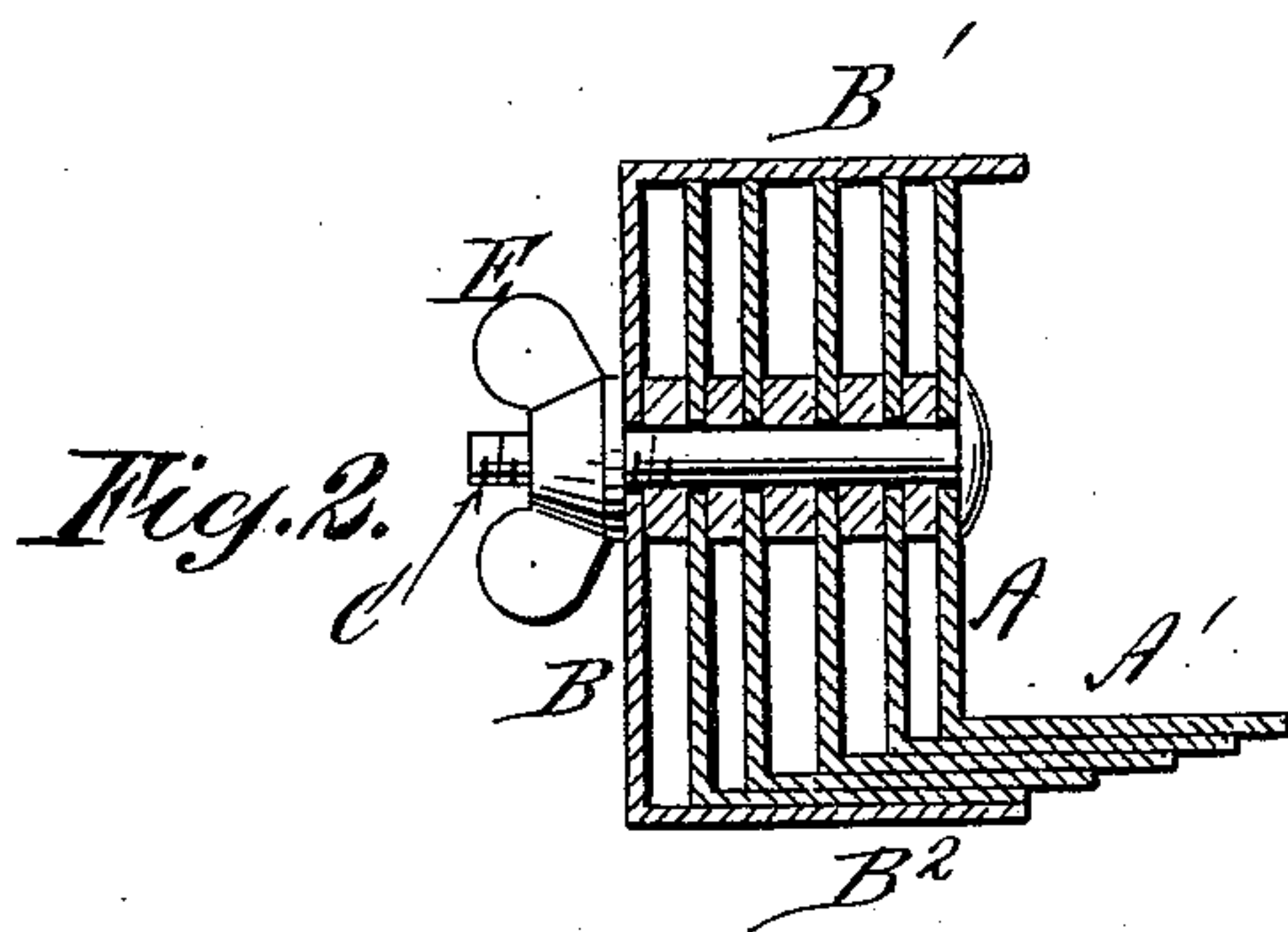
(No Model.)

4 Sheets—Sheet 1.

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

No. 562,080.

Patented June 16, 1896.



Witnesses:  
D. W. Gardner.  
G. T. Mink

Inventors:  
Louis Kossuth Johnson,  
Abbot Augustus Low  
By their attorney  
George William Mink

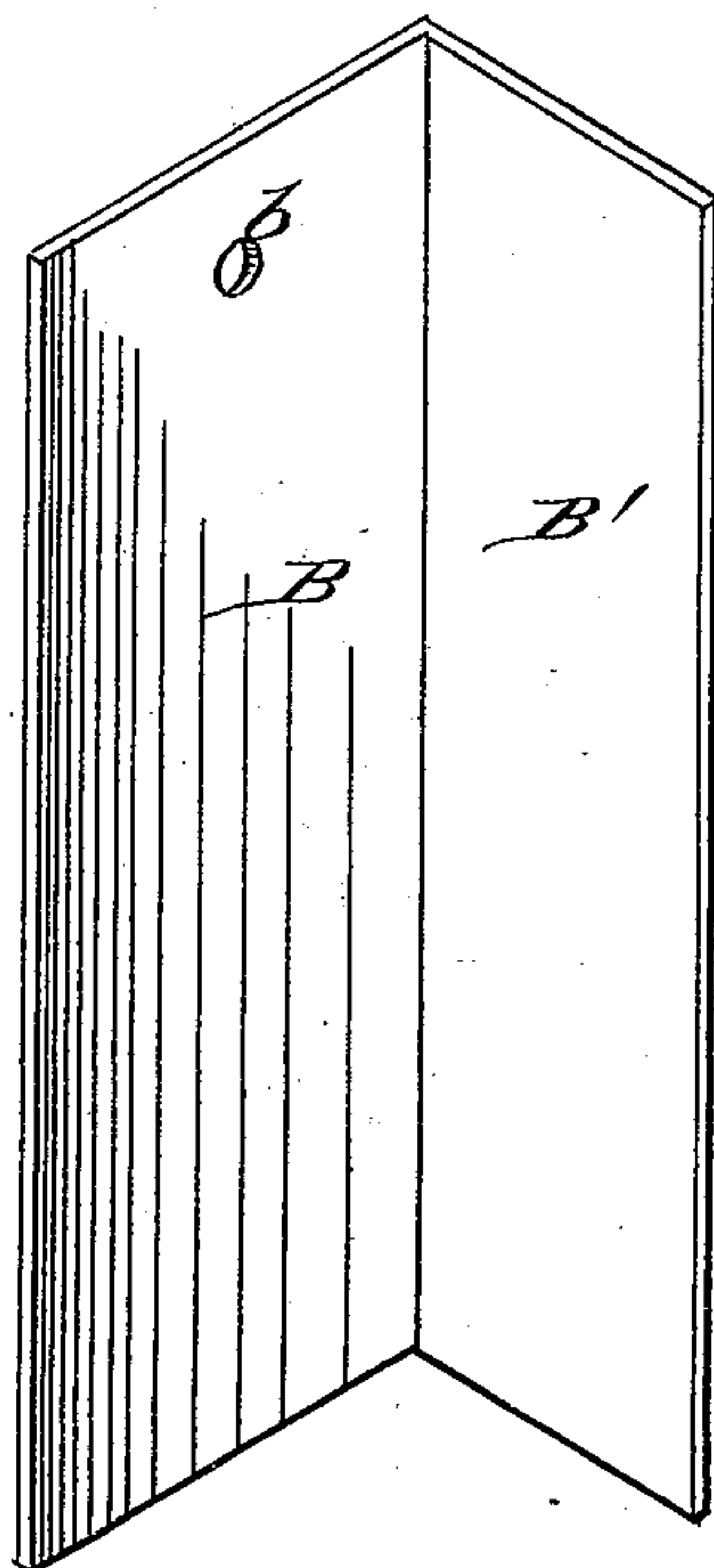
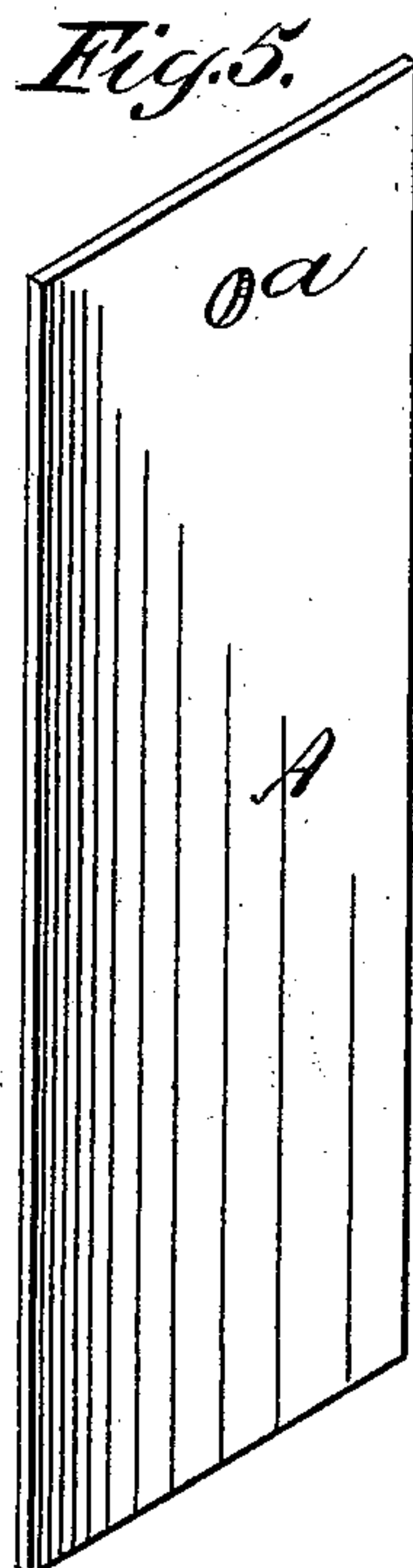
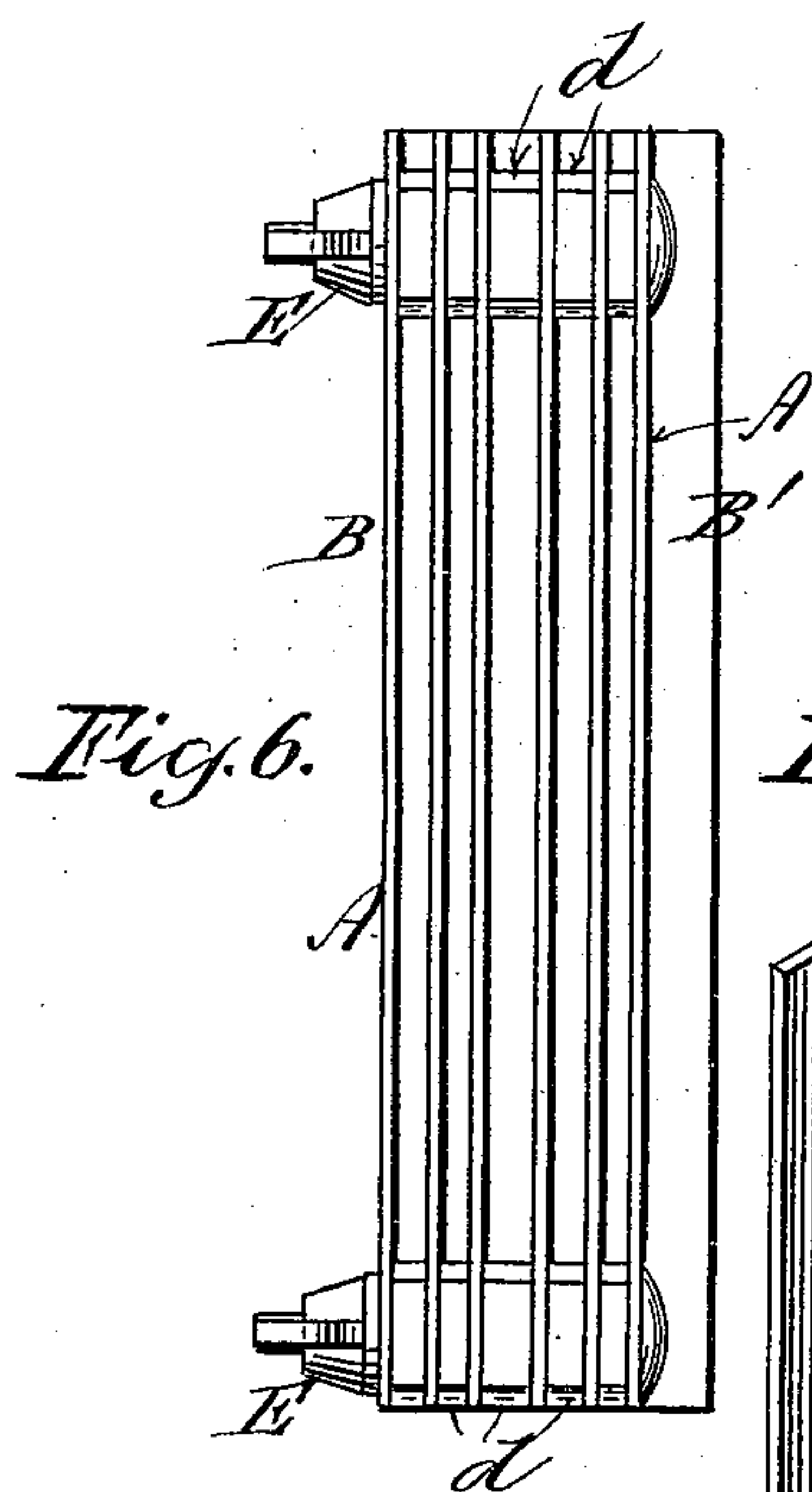
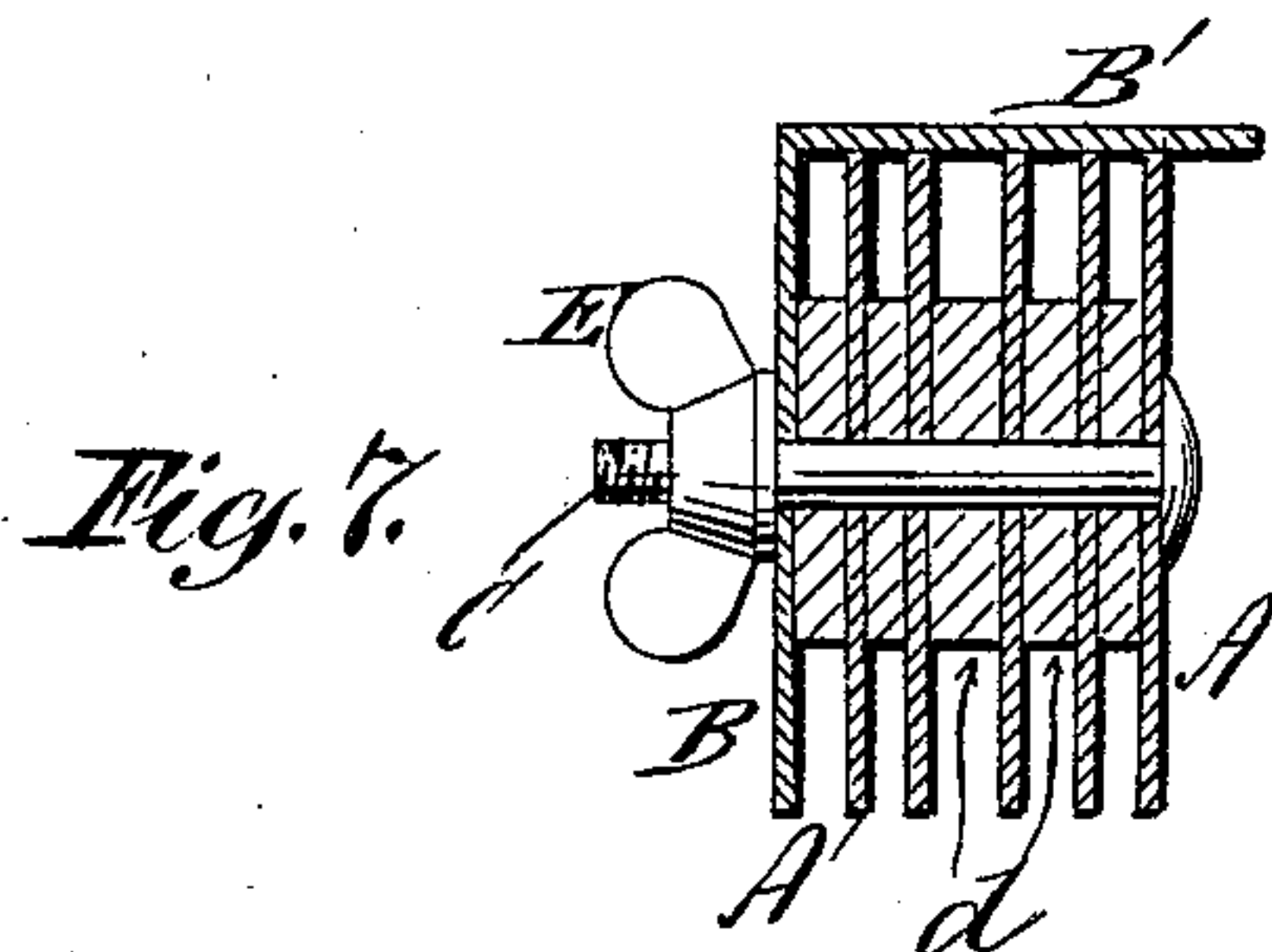
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L. K. JOHNSON & A. A. LOW.  
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No. 562,080.

Patented June 16, 1896.



Witnesses:  
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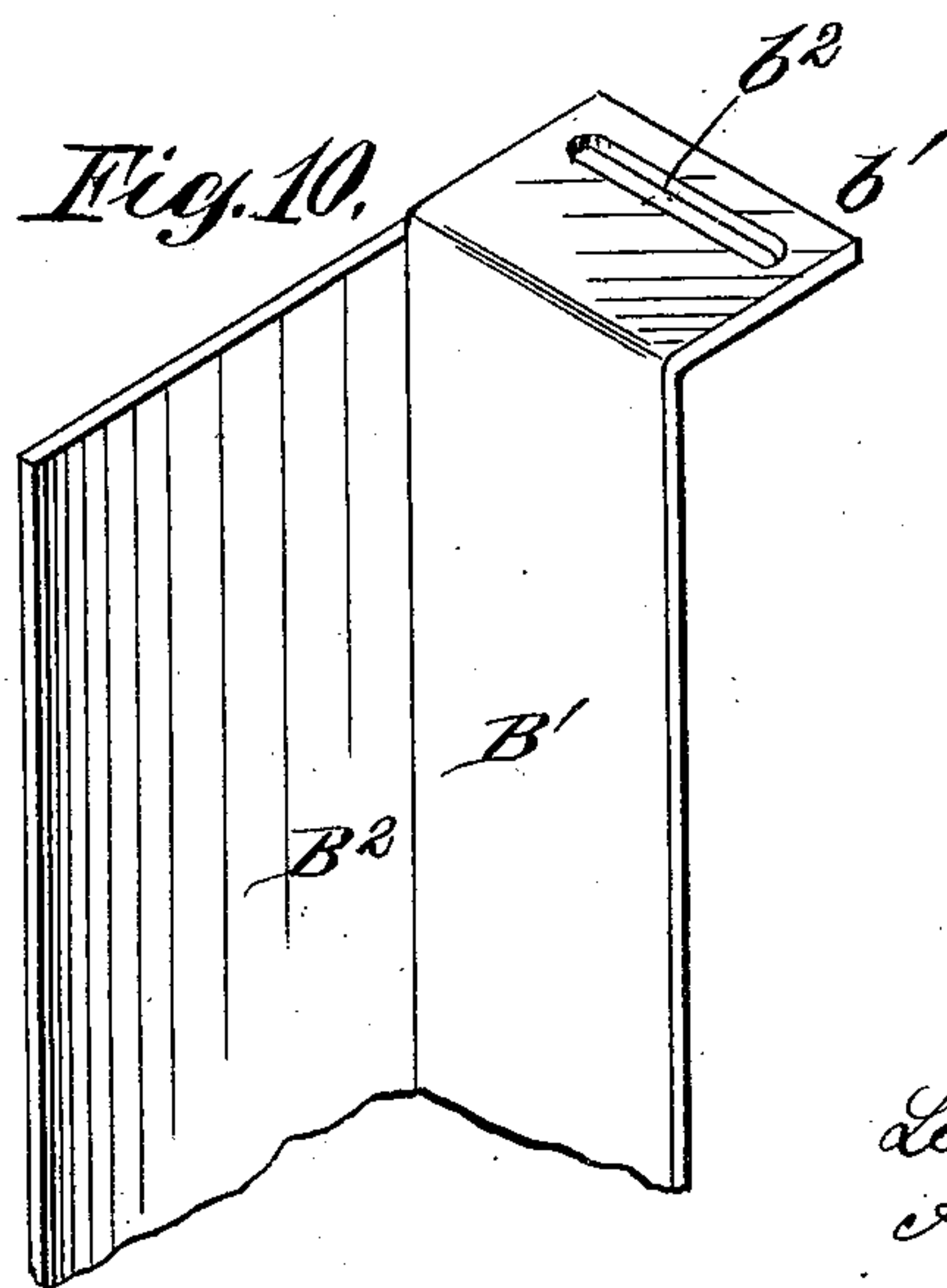
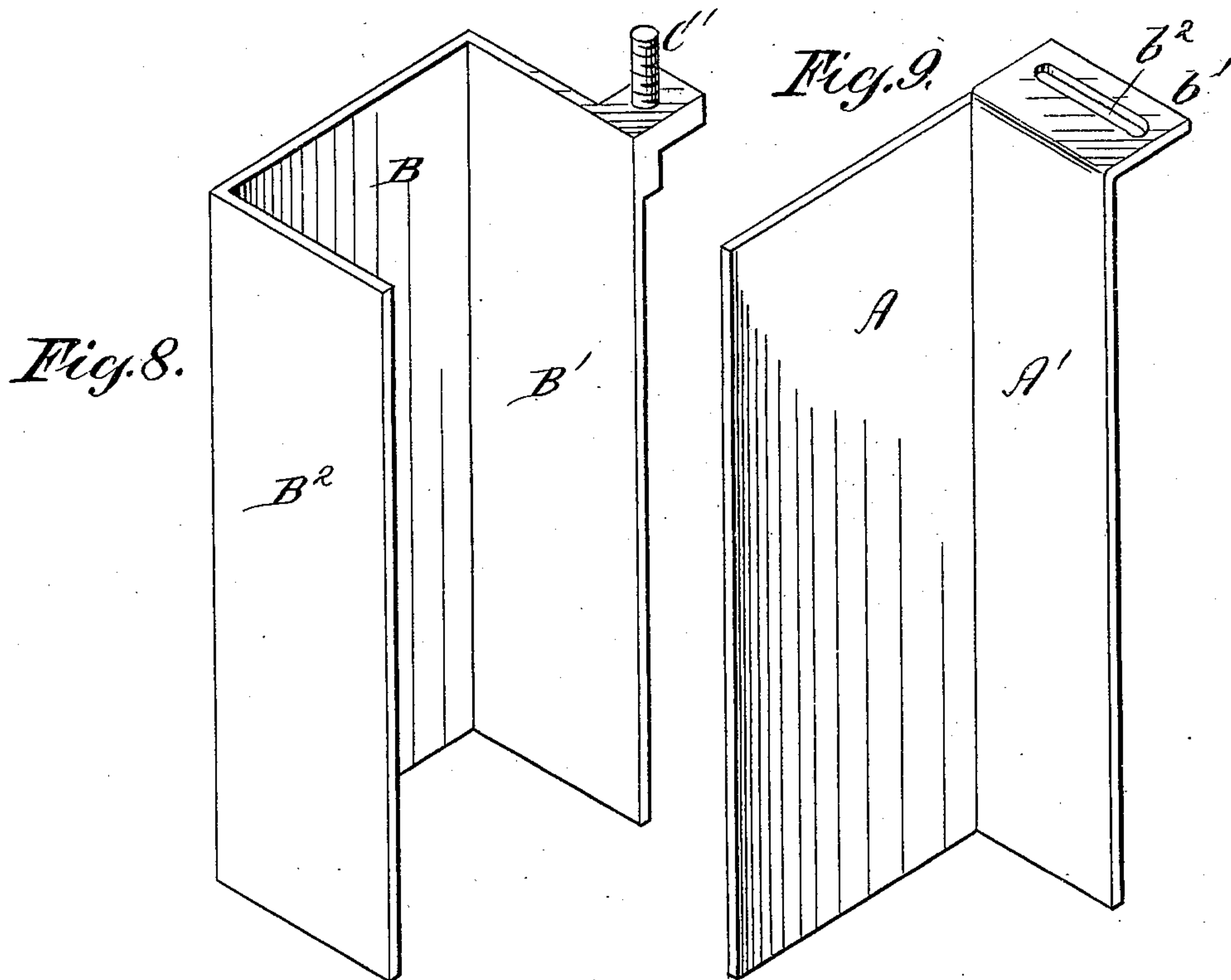
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4 Sheets—Sheet 3.

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

No. 562,080.

Patented June 16, 1896.



Witnesses:  
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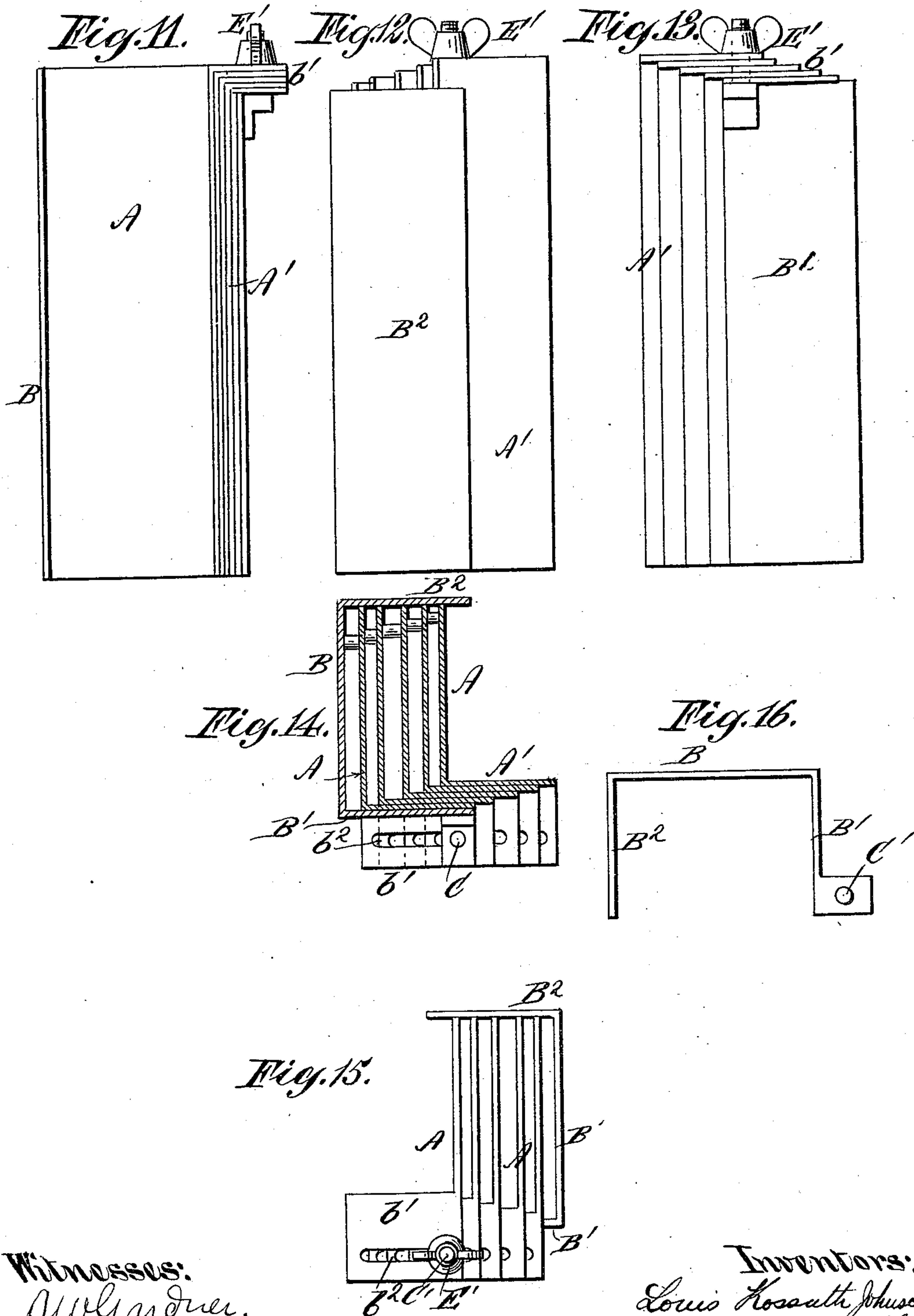
(No Model.)

4 Sheets—Sheet 4.

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

No. 562,080.

Patented June 16, 1896.



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# UNITED STATES PATENT OFFICE.

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

## TYPE-CONTAINING CHANNEL.

SPECIFICATION forming part of Letters Patent No. 562,080, dated June 16, 1896.

Application filed July 8, 1895. Serial No. 555,323. (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.

In our system of plural type-setting we find it convenient, in order to avoid the necessity for turning the types upon their longitudinal axes from their flat sides to their edges, to have the types arranged in the type-containing channels upon their edges instead of upon their flat sides. Since the different types vary in thickness, it is desirable that the containing-channels vary correspondingly in width so as to properly support and sustain the types individually and collectively. Thus in the grouping of the types in adjoining channels to form a given word more or less variation in the width of the channel will be necessary, and in order that the same plural channel may be used for various combinations of letters it is desirable that the side walls or partitions between the channels be relatively adjustable.

The main feature of our present invention consists, broadly, in a plural type-channel having side walls which are relatively adjustable, the means by which this is accomplished being of secondary importance. The invention also includes, in conjunction with the above feature, an exterior side plate formed with a flange which acts as a back and front plate to all the channels.

By our improvements we attain a plural type-containing channel which is adjustable and adaptable to all sizes of type, and are enabled to use types of different fonts and to make any combination or arrangement of letters or characters that may be desirable. By thus having a universal plural channel we reduce the requirement of the plant, saving storage of channels, as would be necessary where the partitions are fixed and only adapted for a particular font of type.

In carrying out our invention we do not

wish to confine ourselves to the identical form and construction of parts herein shown, since it is obvious that the same results may be obtained by various modifications that would in no practical sense depart from the spirit and intent of the invention.

In the accompanying drawings, Figure 1 is an isometrical perspective of a series of five partitions used in conjunction with an exterior angle-plate, the plates or partitions being held apart by washers or spacing-blocks of various thicknesses. Fig. 2 is a transverse section, and Fig. 3 a longitudinal section thereof. Fig. 4 is an isometrical perspective of a modified form of exterior angle-plate; Fig. 5, a similar view of one of the partitions used in conjunction therewith; Fig. 6, a front view of a series of channels formed by the use of the parts shown in Figs. 4 and 5, and Fig. 7 a transverse section thereof. Fig. 8 is an isometrical perspective of another modification of an exterior angle-plate; Figs. 9 and 10, similar views of the partitions used in connection therewith. Fig. 11 is an elevation of the left-hand side of the plural channel; Fig. 12, a front elevation thereof; Fig. 13, a rear elevation thereof; Fig. 14, a transverse section looking toward the upper end of the channel; Fig. 15, a top view of the plural channel; Fig. 16, a top view of the exterior angle-plate.

In the drawings, as a matter of convenience in illustration, the channels and their side walls are shown of reduced length. They may be of any desired length to suit the setting-case in which they are to be used. We have also omitted showing means of supporting our plural channel in the type-setting case, since any of the well-known means may be employed, as in the patents heretofore issued to us for apparatus for carrying out our special system of plural type-setting.

In the simpler form of our plural channel plain plates or partitions A are used, either alone or in conjunction with an exterior angle-plate B, provided with the wide flange B', which constitute the back plate for all the channels, or each plate A may be formed with a back flange A', and the angle-plate B, not only with the back plate B', but also with a front plate B<sup>2</sup>, common to all the channels.

Any suitable or appropriate means may be



employed for clamping the several partitions A B together in prescribed relation to each other. Thus in the first seven figures a threaded bolt C passes through perforations *a b* in the plates A B and through washers *d*, interposed between the plates, the latter and the washers being clamped together by a thumb-nut E.

Where it is desired to store the types and lock them in the channels, this bolt C, with washers *d* and thumb-nut E, may be duplicated, one set being arranged at either end of the channel, as shown in Fig. 6. By using washers *d*, which are rather scant or slightly less in width or thickness than the types, the latter may be effectually locked in such channels for storage until desired for use, when the bolt C and washers at one end may be removed and the types transferred to other channels, or the remaining clamp-nut E may be loosened sufficiently to release the types from frictional contact with the side walls, so that when the plural channel is placed in the type-case the types will descend by gravity in the usual way to the type-platform.

Instead of using the bolts C, nut E, and washers *d*, the backs B' may be formed with rearwardly-projecting flanges *b'*, each formed with an elongated slot *b*<sup>2</sup>. These flanges *b'* overlap each other, as will be seen by reference to Figs. 11, 13, and 15, all the slots *b*<sup>2</sup> coinciding with each other longitudinally. A stud-bolt C' projects from the rear wall B' of the exterior angle-plate B, extending through all the slots *b*<sup>2</sup> and engaging above with the lock-nut E'. Thus when the nut E' is loosened the partitions A may be indi-

vidually and collectively moved and adjusted with relation to each and to the exterior plate B. When the desired adjustment is attained, the tightening of the thumb E' of the screw-stud C' locks all the parts together.

It will be seen that our device is simple and inexpensive in construction, and that when not desired for actual use it may be closed or the parts slid together into compact form for storage or transportation.

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

1. In combination with one or more movable partitions an exterior angle-plate formed with a back plate common to all the channels substantially in the manner and for the purpose described.

2. In combination with one or more movable side walls or partitions, an exterior angle-plate formed with a back plate common to all the channels and with a front plate common to all the channels substantially in the manner and for the purpose described.

3. In combination with a series of movable side walls or partitions, a series of washers or spacing-blocks interposed between the said side walls or partitions and means for clamping the said washers or blocks and the said side walls or partitions together, substantially in the manner and for the purpose described.

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ABBOT AUGUSTUS LOW.

Witnesses:

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