

(No Model.)

2 Sheets—Sheet 1.

L. K. JOHNSON & A. A. LOW.
PRINTER'S TYPE SETTING COMPARTMENT.

No. 358,041.

Patented Feb. 22, 1887.

Figure 1.

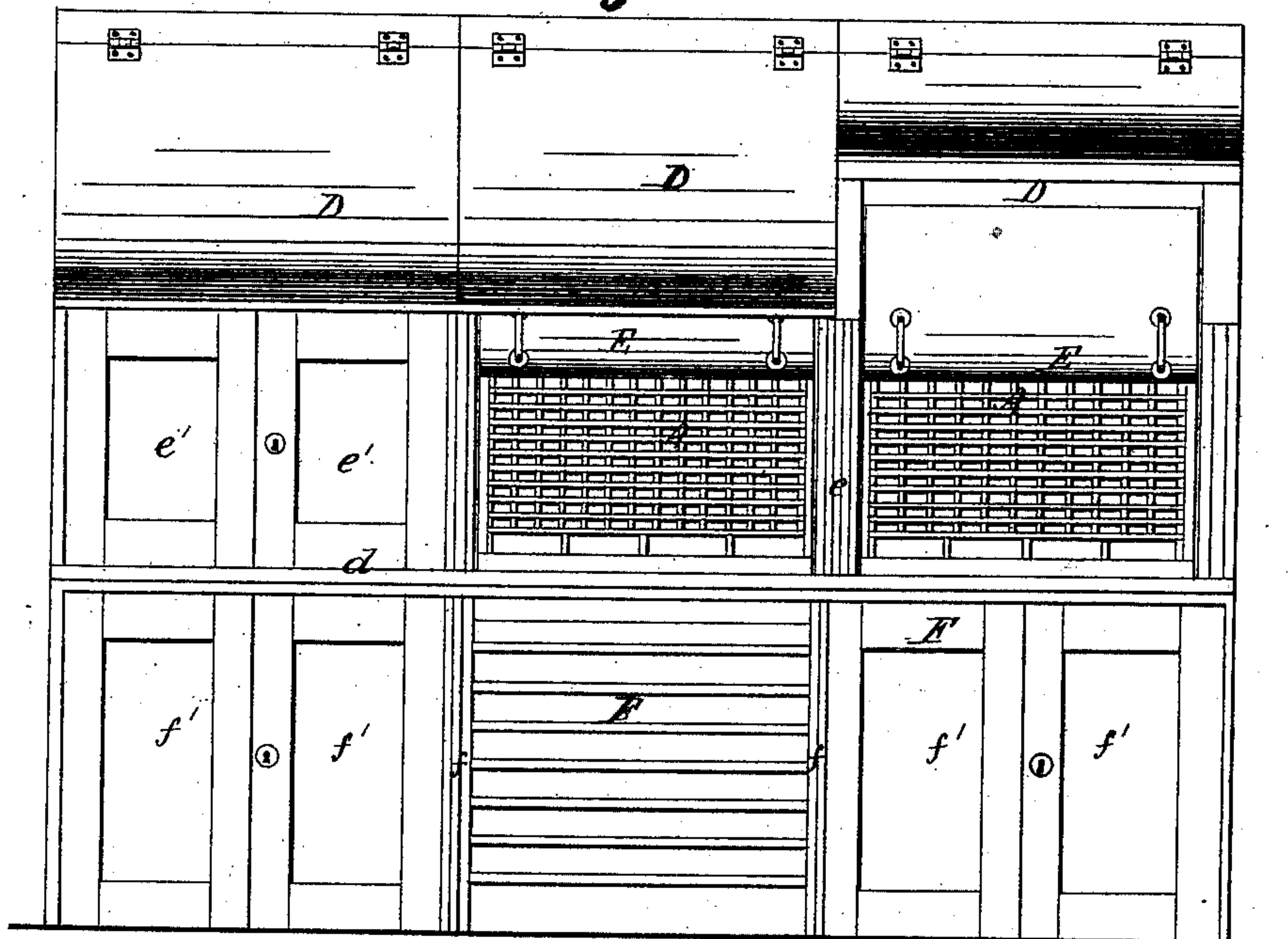


Figure 3.

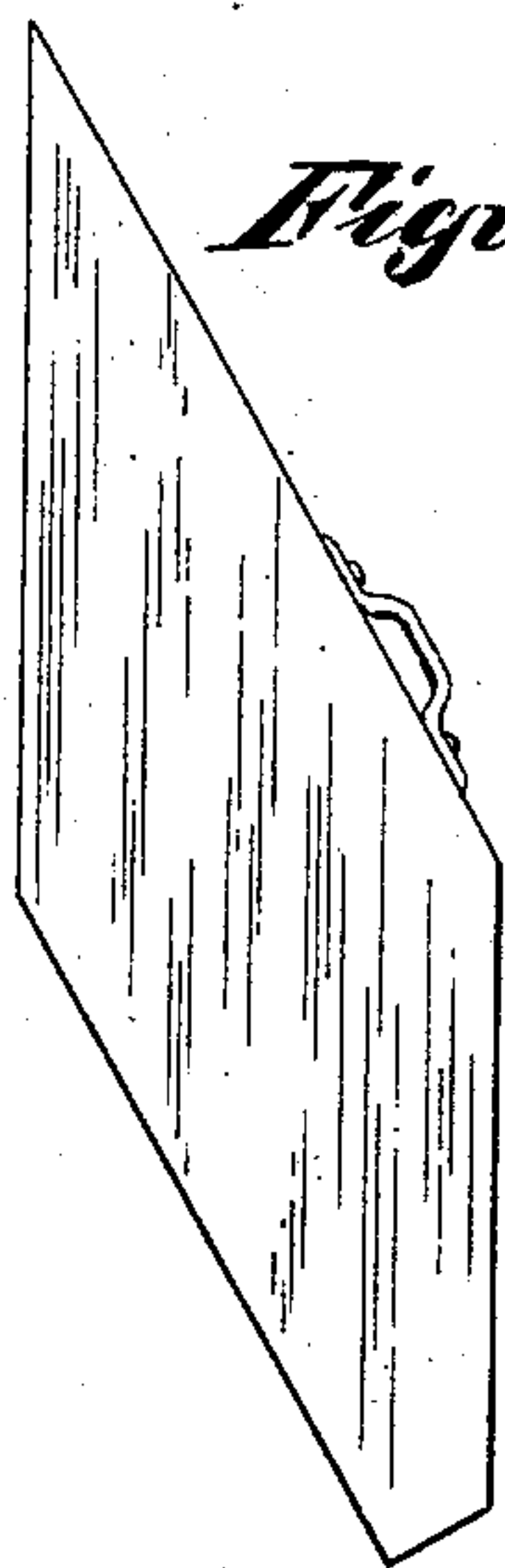
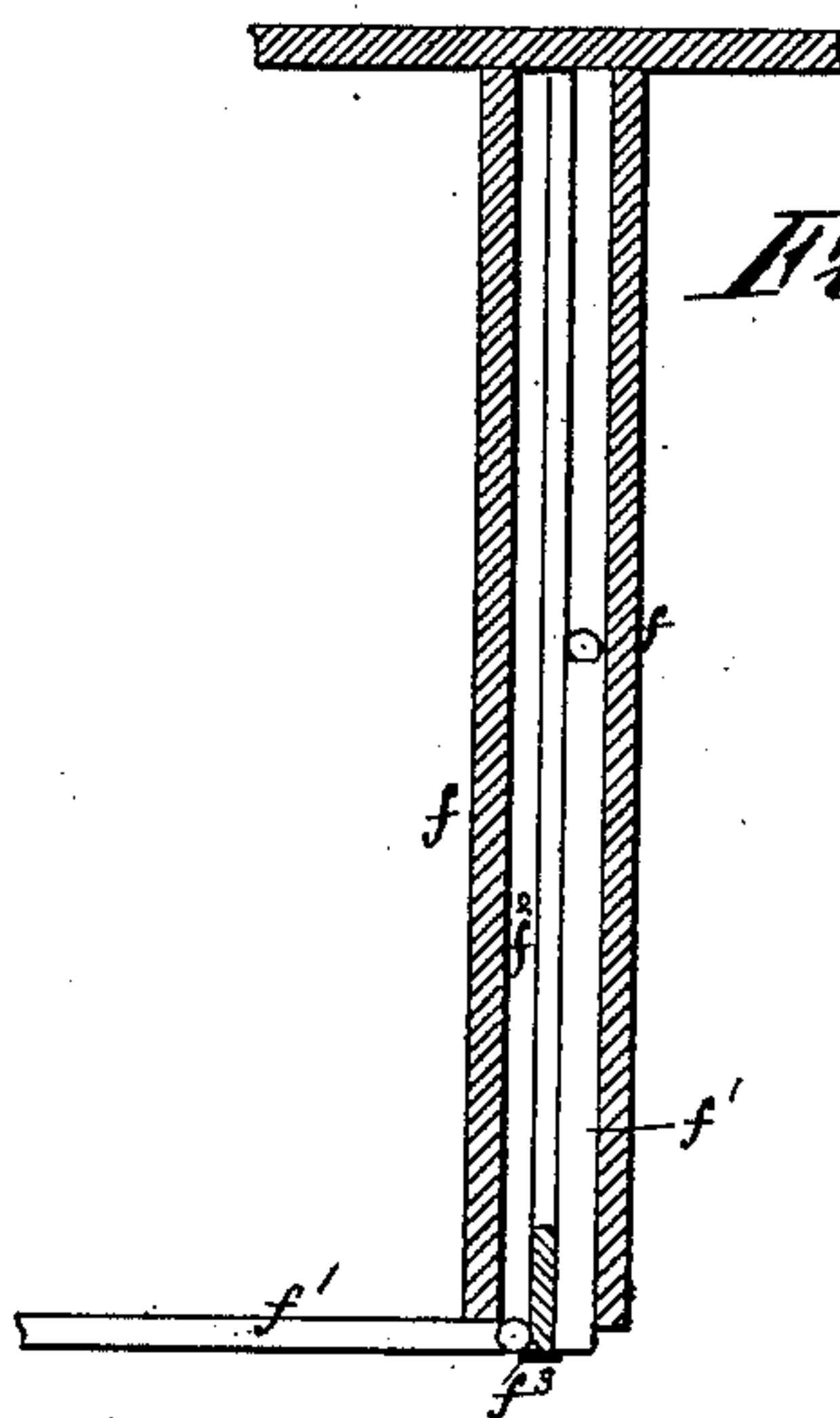


Figure 4.



Witnesses:
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H. M. A. Pollock

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Louis K. Johnson
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By their attorney,
Geo. H. M. M. M.

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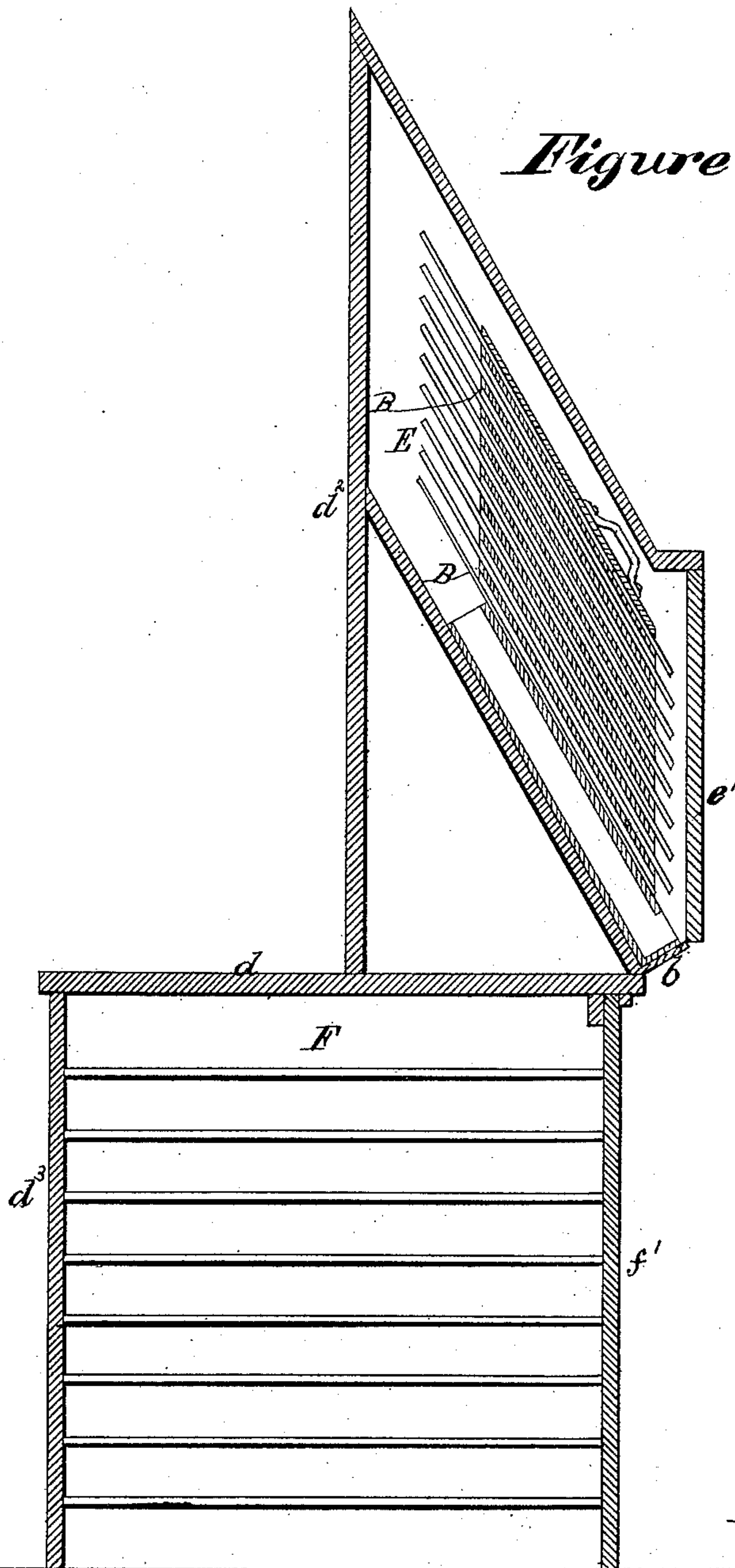
2 Sheets—Sheet 2.

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Figure 2.



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UNITED STATES PATENT OFFICE.

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PRINTER'S TYPE-SETTING COMPARTMENT.

SPECIFICATION forming part of Letters Patent No. 358,041, dated February 22, 1887.

Application filed October 27, 1884. Serial No. 146,519. (No model.)

To all whom it may concern:

Be it known that we, LOUIS K. JOHNSON and A. AUGUSTUS LOW, citizens of the United States, residing in the city of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in the Arrangement and Construction of Printers' Type-Setting Compartments, of which the following is a specification.

Our invention relates to the special combination and arrangement, with an inclosed printer's composing-compartment, substantially such as herein set forth, of a special form of portable and interchangeable type-channel case, as and for the reasons hereinafter set forth.

Our improvements are designed particularly with regard to and are intended for use in conjunction with the form of compositor's type-case designated in Patents No. 254,019, February 21, 1882; No. 263,707, September 5, 1882; No. [271,711, February 6, 1883; No. 269,168, June 12, 1883; No. 268,409, December 5, 1883; No. 265,667, April 10, 1883, in which the types are arranged in prescribed positions in channels which are removable from the body of the case, and from the lower ends of which, when the channels are in position in the case, the types are removed by hand. In the cases referred to the containing-channels are inclined at such an angle that the columns of type contained therein descend automatically by their own weight as fast as those below are withdrawn by the fingers of the compositor.

As heretofore constructed, and as shown and described in most of the patents hereinbefore mentioned, our type-containing channels have been arranged in the body of the case "upon the flat" with their open edges and the faces of the types toward the left-hand side of the case, experiment having demonstrated that such position is the best attainable for the removal of the types from their respective channels laterally when the right hand was employed, as has heretofore been usual with compositors, the stick being held in the left. By this arrangement the lower types in each column, being withdrawn transversely and slightly toward the right, were cut off without danger of moving those next above longitudinally,

any tendency to such longitudinal motion being in the direction of the back or bottom of the containing-channels, and being, therefore, calculated to preserve the alignment of the types.

In order to relieve the lower types in a column as much as possible from the weight of the column above, so as to facilitate their withdrawal transversely from between the type-supporting shoulders and the ends of the containing-channels, it is desirable to make their inclination sufficient only to just allow the types to slide slowly forward and downward upon the under or back side of the containing-channels, the latter sustaining the greater part of the weight of each type. It is obvious, therefore, and experience has demonstrated, that the presence of even a comparatively slight quantity of dust or other foreign matter in the containing-channel is sufficient to retard or prevent the uniform descent of the types, besides tendency to scratch and unduly wear them. This is especially the case where the finer grades of type are used, in which the delicate hair-lines are very easily deranged. In practice it is also desirable that a compositor should be able to leave work in the midst of a job without the necessity of disturbing the case or copy and at the same time have the types isolated and protected from dust, interference, &c.

Since compositors as a rule work independently or by the "thousand ems," it is important to each individually that his case, after it is filled and arranged to suit his convenience, should remain undisturbed during his absence, especially since in these cases whole columns or channels of type may be quickly and conveniently withdrawn from their position in the body of one case and inserted into another. Again, when types are withdrawn heedlessly or otherwise from this case by others, and not to be at once placed in the stick, they are necessarily "pied," since they cannot be dropped back into place, as might be done in the old form of compositor's type-case, but must be transferred to the distributing apparatus to be reset in a prescribed manner, thus involving a waste of time and labor, which it is desirable to guard against. To obviate these difficulties we construct a compositor's type compart-

ment, which is adapted to receive and properly present the type-containing channels constituting a "case," and also to receive and store large quantities of distributed types, which compartments may be readily opened or closed without disturbing the contents, and which practically gives each compositor exclusive control of the material placed under his charge, and enables him to maintain the apparatus in clean and good working order with comparatively slight expenditure of time and labor.

In our application No. 91,047 we show one of our type-cases as inclosed at the rear and provided with a combined copy-holder and cover for the front. The present arrangement is not the equivalent of that therein shown, but while it enables us to simplify the construction of the case by dispensing with some of the parts shown therein and still accomplish the exclusion of dust, &c., it also answers other results in enabling the compositor to close and lock up the work, &c., without disturbing "copy," &c., and affords full protection for the distributed matter that may be under his charge.

The essential feature of novelty in our present application consists in making the type-channel holder for the reception and presentation of the type-containing channels and their contents independent of and removable from its support within the compositor's compartment, so that two or more interchangeable cases may be used in connection with a single compartment. By this means an exhausted case may be readily and quickly removed and a full one substituted therefor. This feature is also of advantage where an entire change in style or size of type is called for by the nature of the work to be done.

In the accompanying drawings, Figure 1 is a front view of three of a series of compositors' compartments arranged side by side, one being closed and the others showing the channel-case in position. Fig. 2 is a vertical section through the center of one of the compartments, &c.; Fig. 3, a side elevation of a channel-case removed from the compartments. Fig. 4 is a detail view illustrating the construction and operation of the sliding doors or covers.

The series of compartments D D are preferably constructed of uniform size and dimensions, as indicated in Fig. 1, and with a continuous table or type-case support, *d*, extending from one end of the series to the other.

Each compositor's compartment D D is divided into two sections, an upper, E, and lower, F, by the table *d*. Each of these sections is inclosed at the rear by walls or partitions *d*² *d*³, which, like the top and table, are continuous from one end of the series to the other. The side walls, *e e f f*, of both sections E F of each compartment D are made hollow to receive the sliding doors or partitions *e' e'* and *f' f'*, by which the fronts of the sections E F are closed when not in use. The construc-

tion and operation of these doors will be more readily understood by reference to Fig. 4, which represents a horizontal section through one of the lower side walls *f*. In this view one of the slides or doors *f'* is shown as withdrawn from the recess *f*² and turned at right angles thereto to close one side of a section, *e*, while the other door or slide *f'* is represented within the recess.

The doors or slides *f' f'* are prevented from being fully withdrawn from the fronts of the recess *f*² in the side walls *f f* by projections or shoulders *f*³ *f*³ upon their inner ends, which, when the doors are drawn out fully, come in contact with suitable stops, which, however, allow the doors to swing laterally into position at right angles to the side walls. The doors *e'* enter the side walls *e e*, and are constructed and operated in substantially the same manner.

It is obvious that the door for closing both sections E and F may be arranged to slide into horizontal recesses, if preferred, instead of into the vertical recesses herein shown and described. The doors *e' f'* are preferably provided with locks, &c., so that each compositor may have exclusive control of his own compartment. By thus providing for the disposition of the doors when not in use we are enabled to arrange the compartments side by side and to leave alleys between the rows free and unobstructed.

The lower sections, F, are designed for the storage of distributed types and for other similar uses convenient to the compositor.

The type-case bodies A A, which are constructed upon the principle set forth in the patents hereinbefore referred to, are formed independently, as indicated in Fig. 2, so as to be inserted into or removed from the upper sections, E, of the compartments D at pleasure.

In the accompanying drawings the details of construction—such as the type and channel supporting shoulder and the containing-channels—are omitted, and the bodies of the cases A A alone are indicated, reference being had to the patents before cited.

Suitable seats or rests are formed in the upper sections, E, of the compartments for the reception and support of the bodies of the channel-cases A A, those shown in the drawings consisting of the inclined backs or floors B and the shoulders *b* at the front of the compartments.

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

In combination with a compositor's compartment, substantially such as described, a removable type-channel holder, constructed substantially in the manner and for the purpose described.

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