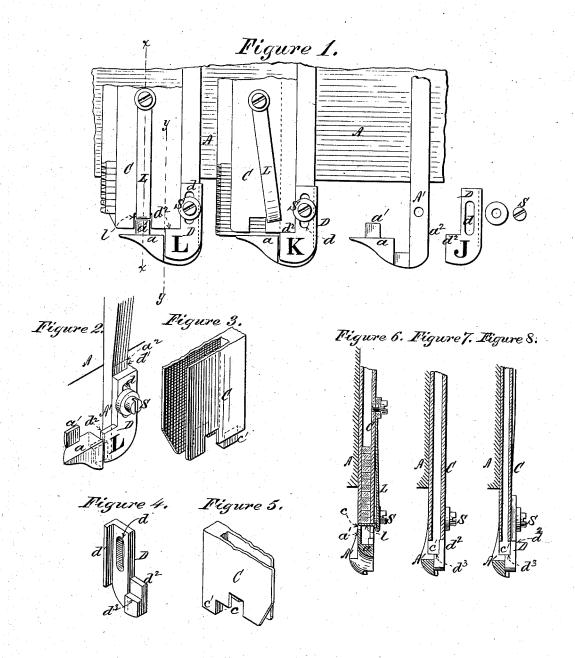
(No Model.)

## L. K. JOHNSON.

TYPE AND SPACE HOLDER.

No. 263,707.

Patented Sept. 5, 1882.



Witnesses. Ym. A. Pollock. Yost Evans

Inventor: Louis H. Johnson, By his attorney, Leo. H. Miath

## UNITED STATES PATENT OFFICE.

LOUIS K. JOHNSON, OF BROOKLYN, NEW YORK.

## TYPE AND SPACE HOLDER.

SPECIFICATION forming part of Letters Patent No. 263,707, dated September 5, 1882. Application filed October 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, Louis K. Johnson, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type and Space Holders, of which the following is a

specification.

My present invention is related to the type and space holder patented to me August 3, 10 1880, and numbered 230,784, and to the improvements thereon described in my application for patent filed June 11, 1881; and its objects are, first, to adapt a single frame or case to receive and hold type-containing channels of 15 different degrees of thickness, varying according to the size of the several styles of type in common use, thereby obviating the necessity of employing a separate independent case for each variation; secondly, to facilitate the ar-20 rangement of the type-containing channels within the case or bank in any required relation to each other, as may be preferred by the user, by means of interchangeable denomination-marks; thirdly, to support the lower exposed type of each column (when its containing-channel is in place in the case) against lateral displacement toward the rear by a shoulder or tongue-piece projecting upward from the type-supporting ledge or platform 30 and entering a corresponding slot in the rear wall of the containing channel in such manner as to practically constitute a continuation of the latter, irrespective of the relative adjustment of the lower end of the containing chan-

35 nel and the type-supporting ledge or platform. In the accompanying drawings; Figure 1 is a front elevation of three sets of the channel and type-column seats or supports, the first two being shown in use and the third with the 40 adjustable channel-support removed. Fig. 2 is an isometrical perspective of one of the typesupporting ledges or seats with the adjustable channel-support in position; Fig. 3, an isometrical perspective of the lower end of one 45 of the type-containing channels, looking toward its front side; Fig. 4, an isometrical perspective of the rear side of one of the adjustable channel supports; Fig. 5, an isometrical perspective of the rear side of the lower end

Figs. 7 and 8 are sections in plane of line y y, Fig. 1, showing type-containing channels of different thicknesses in position.

In the drawings, A represents a portion of 55 one of the bed-plates from which the type-col-

umn and channel supports project.

The columns of type are supported independent of their containing-channels upon the ledges or seats a, which are made broad enough 60 to accommodate the widest kinds of type in common use. Projecting upward at right angles from these seats a are tongues or shoulders a', the front sides of which are made so as to occupy planes coincident with those of 65 the fronts of the rear walls of the containingchannels when the latter are in position. These shoulders a' project upward a distance equal at least to the degree of adjustment between the seats a and the lower extremities of the 70 containing-channels C requisite to accurately expose a type of any thickness for removal from between them in a lateral direction toward the front of the case.

The rear walls of the containing-channels C 75 C are formed with slots c, which coincide with and receive the shoulders a', so that when the channels C are in position the shoulders a virtually form continuations of the rear walls of the channels down to the seats a a, and 80 thus support the last exposed type of a column against lateral displacement in that direction.

It will be observed that in the present case one end and the greater portion of the body of the lowest type in a column is supported 85 by the shoulder a, while the other extremity of the type projects outward beyond the said shoulder a, to permit of its being grasped by the fingers in a manner similar to that shown and described in my patent, No. 230,784, be- 90 fore refered to; but in the latter case the typesupporting ledge or seat forms a portion of the type-containing channel itself. In the present case the type-seat a forms a portion of the stationary frame or case, while the type-contain- 95 ing channel is supported independently upon a separate adjustable support, D, similar to the manner described in my application of June 11, 1881.

The improvement in the construction of the 100 50 of one of the containing-channels; Fig. 6, a vertical section on plane of line x x, Fig. 1. adapting it to receive and retain (against lateral displacement) the lower ends of type-containing channels of various thicknesses, and to furnish a convenient surface upon which to affix or engrave the denomination-mark which is to indicate the character of the type contained in the particular channel which it is employed to support. Since these adjustable channel-supports are all made alike and interchangeable one with another, it is obvious that the relative arrangement of the denomination-marks which they bear can be varied to suit the distribution of the different denominations of types used in the case in the manner that may be most desirable to the user.

Each channel-support D is formed with a longitudinal slot, d, through which a set-screw, S, passes to secure it to and for the purpose of adjusting it upon the projection A' of the

frame or bed A.

In order to preserve the alignment of the support D under all circumstances of adjustment it is provided with a flange, d', parallel with the slot d, which flange engages with the straight edge a² of the projection A'. It is further formed with a retaining-shoulder, d², which engages with and secures a projection or foot, c', upon the lower end of the channel C, so as to prevent any lateral movement of the latter when in position.

The bearing for the vertical support of the channel may be either upon the shoulder  $d^3$ , as shown in Fig. 8, or upon the upper edge of the shoulder  $d^2$ , or at both said points, as shown in Fig. 7, the only essential requisite being that the shoulder  $d^3$  must be at least broad

enough to furnish a bearing for the narrowest

channel that may be used.

By these means the case, as a whole, is adapted to the wants of the smaller class of printing-establishments, or in all cases where a large variety of work is to be done, as in so-called "jobbing-offices," and where economy of space is a desideratum, since a single case will readily accommodate containing-channels adapted to types of different sizes and styles, the only adjustment necessary being that of the channel-supports D, in order to regulate the distance between the type-seats a and the ends

of the containing-channels according to the

50 thickness of the type to be used.

As conductive to the same advantageous results, the spring-latch or type-supporter L is also of importance, since it not only furnishes a temporary means of support for the column of type while the latter is being transferred from 55 the distributing-machine to the setter-case, but also affords a convenient lock for retaining the type within its containing-channel during storage when not in use. This spring-latch L consists essentially of a flat spring, pivoted at its 60 upper end to the front side of the containingchannel, and having at its lower end a lateral projection or shoulder, l, which is adapted to pass under the lower extremity of the channel or to enter a slot formed in the front wall there- 65 of, as shown in Figs. 1 and 6 of the drawings, for the purpose of furnishing a support for the column of type, as shown in Fig. 6. When not in use its lower end is simply withdrawn and turned to one side, as shown in Fig. 1.

What I claim as my invention is-

1. In a type and space holder, substantially such as described, the adjustable channel-support D, provided with the retaining-shoulder  $d^3$  and the supporting-shoulder  $d^3$ , in combination with the stationary type-seat a and the type-containing channel C, provided with the bearing or foot e', arranged and operating substantially in the manner and for the purpose described.

2. In a type and space holder, substantially such as described, an interchangeable channel-supporter, D, provided with a denomination-mark, in combination with the stationary type-seat a and the type-containing channel C, substantially in the manner and for the purpose

designated.

3. In a type and space holder, substantially such as described, the stationary type-seat  $\alpha$ , provided with the type-retaining shoulder  $\alpha'$ , 90 in combination with the type-containing channel C, having the slot c formed in its rear wall, and with an adjustable channel-support, D, substantially in the manner and for the purpose described.

LOUIS K. JOHNSON.

Witnesses:

A. AUGUSTUS LOW, GEO, W. MIATT.