

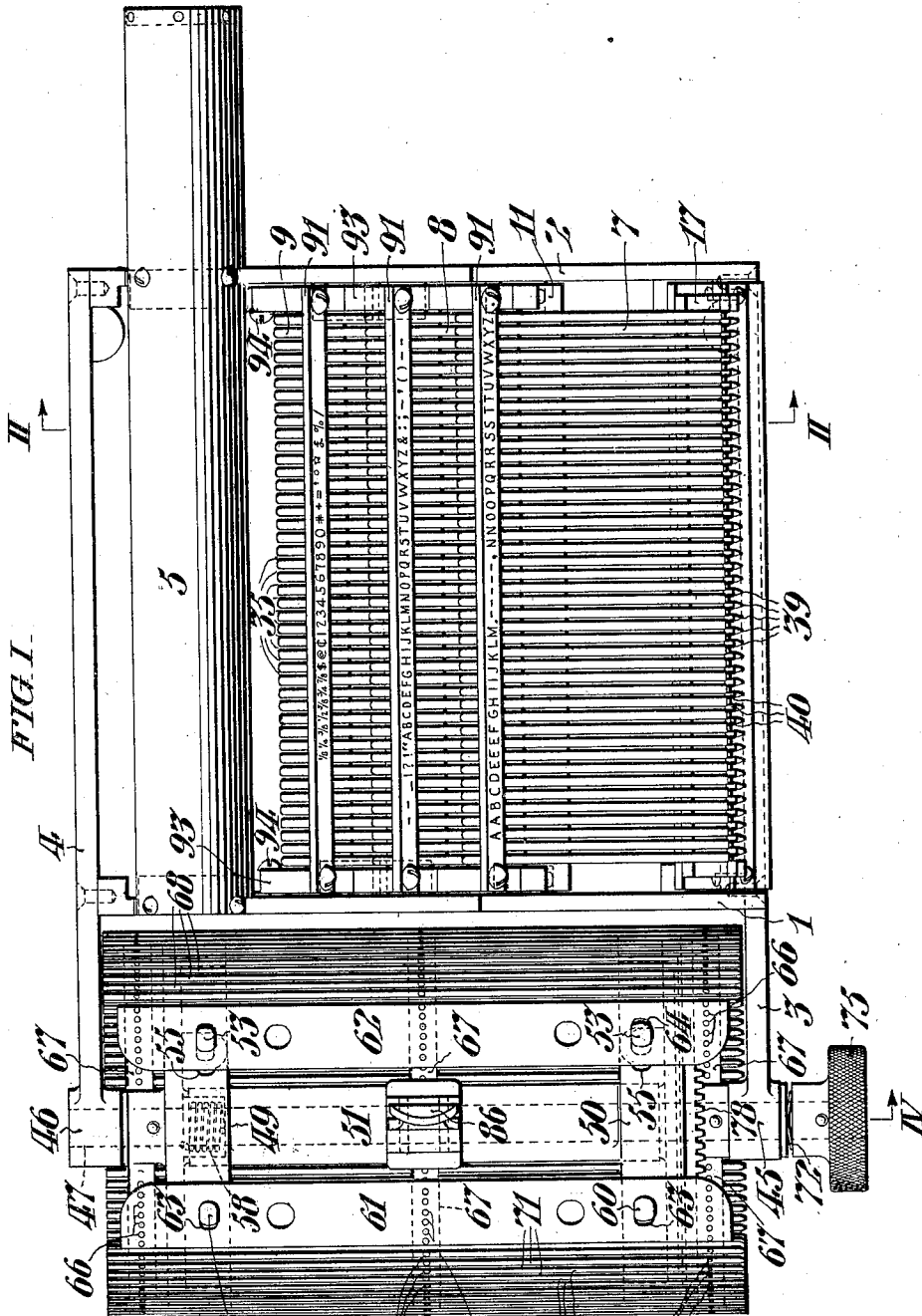
S. A. NEIDICH.
TYPE CASE.

APPLICATION FILED JUNE 26, 1908.

Patented Mar. 24, 1914.

3 SHEETS—SHEET 1.

1,091,237.



WITNESSES:

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INVENTOR:

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TYPE CASE.

Patented Mar. 24, 1914.

3 SHEETS--SHEET 2.

1,091,237.

WITNESSES:

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FIG. IV

9 36 39 40 17

INVENTOR:

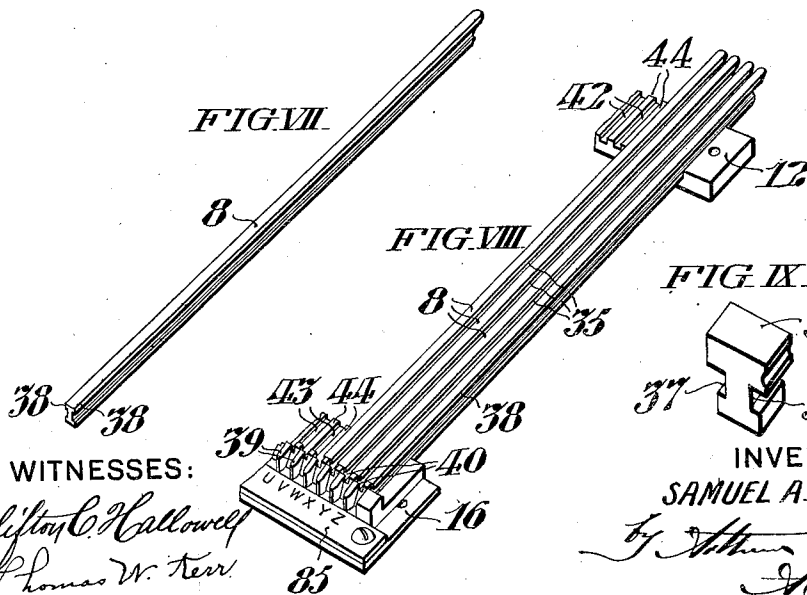
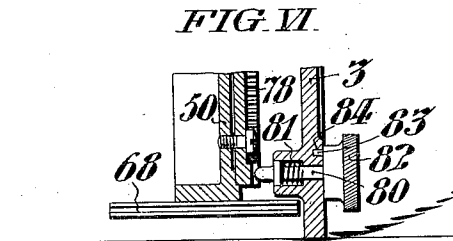
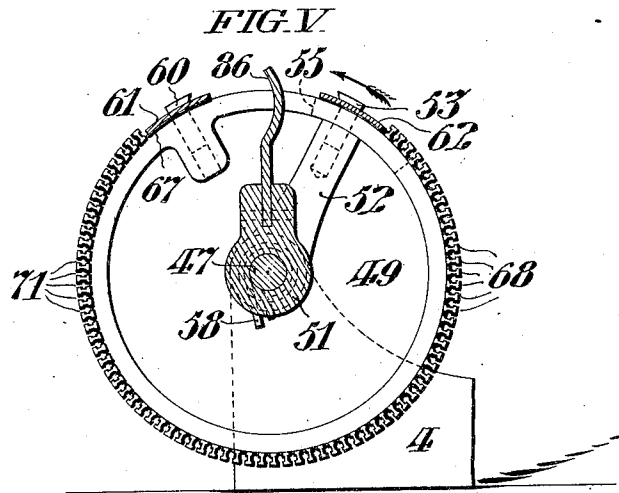
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3 SHEETS—SHEET 3.

1,091,237.



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UNITED STATES PATENT OFFICE.

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TYPE-CASE.

1,091,237.

Specification of Letters Patent.

Patented Mar. 24, 1914.

Application filed June 26, 1908. Serial No. 440,430.

To all whom it may concern:

Be it known that I, SAMUEL A. NEIDICH, of Burlington, in the county of Burlington and State of New Jersey, have invented a certain new and useful Improvement in Type-Cases, (for which British Patent No. 26,021 of 1908 was granted to me after the filing of this application,) whereof the following is a specification, reference being had to the accompanying drawings.

My improvement is particularly applicable to cases in which type are permitted to gravitate in stationary type holders including vertical font channels having at their lower ends recesses which permit the type to be removed singly, but prevent the release or removal of more than one type at a time.

The form of my invention hereinafter described comprises a case containing a plurality of such stationary type holders and a drum arranged to support a flexible chase comprising a plurality of type channels to which the type may be transferred from the font channels in the case. Said drum comprises means for resiliently retaining the flexible chase wrapped upon it; said means being manually movable to release the chase and permit it to be removed from the drum for transference to a printing cylinder or storage in plane position. Said drum is also provided with adjustable means arranged to maintain it in coöperative relation with said stationary type holders, including a movable detent.

My invention comprises the various novel features of construction and arrangement hereinafter described.

In the drawings; Figure I, is a plan view of a case conveniently embodying my improvement. Fig. II, is a vertical sectional view of said case, taken on the line II, II, in Fig. I. Fig. III, is a fragmentary front elevation of said case showing the type abutments and discharge recesses at the lower ends of the type channels. Fig. IV, is a fragmentary sectional view, taken on the line IV, IV, in Fig. III, but on a larger scale. Fig. V, is a fragmentary vertical sectional view, taken on the line V, in Fig. I, showing the construction and arrangement of the chase drum and means for resiliently retaining the flexible chase wrapped upon it. Fig. VI, is a fragmentary sectional view, taken on the line VI, in Fig. I, showing

the means for preventing accidental rotation of the chase drum. Fig. VII, is a perspective view of one of the type font channels. Fig. VIII, is a perspective view showing several type channels mounted in their bearing and abutment plates. Fig. IX, is a perspective view of a single type conveniently shaped to fit between said type channels.

In said figures; the case comprises the left and right hand standards 1, and 2, which are connected in rigid relation by the front frame plate 3, the rear frame plate 4, and the top rest plate 5.

The type font banks 7, 8 and 9 consist of parallel channels provided by rails (preferably of I-form in cross section), disposed in parallel relation in respective panels, being cross connected in rigid relation by their respective bearing plates 11, 12, and 13, and abutment plates 15, 16 and 17. Said bearing plates are respectively provided with sockets fitted to corresponding dowel pins 20, 21 and 22 in the lugs 23, 24 and 25, projecting from said standard, and the abutment plates are similarly provided with sockets fitted to corresponding dowel pins 27, 28 and 29 in the lugs 31, 32, and 33, likewise projecting from said standards; the arrangement being such that each of said banks may be readily removed as a unit from the case when desired.

As shown in Fig. I, III and VIII; the type channels of the banks 7, 8 and 9, aforesaid are so disposed as to receive in the spaces 35 between them type 36, which are conveniently shaped, as shown in Fig. IX, having recesses 37 in their opposite sides to engage the flanges 38 of said channels and thus prevent the accidental dislodgment of the type from said spaces 35.

As shown in Figs. II, III, and IV; the abutment plates 15, 16 and 17, are provided with respective abutments in alinement with the respective type cases 35 between said channels so as to prevent the discharge of said type 36 in the direction of the length of the channels. However, discharge recesses 40 are provided between said abutment and the ends of the channels as best shown in Fig. III, of such dimensions as to permit the type to be withdrawn singly when in contact with the abutments, and such withdrawal may be effected by any suitable implement, for instance, a compos-

ing stick having two tines at its end capable of embracing one of the abutments 39 and projecting into the recesses 37 of the immediately adjacent type, so that the letter may be lifted out of the recess 40 immediately adjoining said abutment 31.

Said bearing plates 11, 12 and 13 and said abutment plates 15, 16 and 17 may be conveniently formed of metal, cast with parallel grooves 42 and 43 to fit the type rails which may be secured therein by swaging the adjacent edges of the ridges 44 between said grooves 42 and 43 so as to pinch said rails between said ridges.

At one side of the type case described is a drum, composed of a rotatable holder and a flexible blanket removably mounted thereon and having parallel channels into which the type from the stick may be transferred. This holder, the means for turning and locking it, and the means for holding the flexible blanket thereon, are shown, described and claimed in my application No. 658,462, filed November 4, 1911. For the sake of completeness, however, I will describe such features herein.

Said frame plates 3 and 4, comprise respective bearings 45 and 46, for the shaft 47, of the drum which comprises the opposite heads 49 and 50. The oscillatory hook frame 51, is mounted to turn loosely on said shaft 47, and has at its opposite ends the arms 52, having the hook fingers 53, extending through slots 55, in said heads 49 and 50. The spring 58, which encircles said shaft 47, within said hook frame 51, is attached at its respectively opposite ends to said frame and the drum head 49, and the tension of said spring is such as to press said movable hook fingers 53, in the direction of the arrow marked on Fig. V, toward the hook studs 60, which are rigidly secured in said heads 49 and 50. Said drum supports a flexible type chase having the opposite end plates 61 and 62 with openings 63 and 64 respectively adapted for engagement with said hook studs 60 and hook fingers 53. Said chase plates 61 and 62 being curved to fit the drum as shown in Fig. V, are connected by the rivets 66 in rectangular relation with the flexible spring metal bands 67, as shown in Fig. I, and, the series of type channels 68 are disposed in parallel relation, transversely with respect to said bands 67 and each separately secured to the latter, conveniently by the rivets 69. Said channels 68 are tapered at their end shown at the lower side of Fig. I, to afford at that edge of the chase, flaring entrances to the type spaces 71 between said channels, so that the type 36 may be readily slid into said spaces 71, from the composing stick aforesaid, with which they have been picked from the case, as above described. Said drum is shown in Fig. I with the space between the ends of the

chase presented at its top, so as to disclose the inner construction of the drum, but, in practice, it is found convenient to successively present said type spaces 71, at the top of the drum, in vertical alinement with the axis of its shaft 47; by turning the knob 75 which is frictionally engaged by the spring 72, interposed between said knob and the bearing 45 as shown in Fig. I. Moreover, in order to prevent accidental displacement of said drum from any selected position of rotation; I provide the drum head 50 with the circular rack 78, shown in Figs. I and VI, and mount in the frame plate 3, below said knob 75, the detent plunger 80, which, as shown in Fig. VI, is normally pressed inward by the spring 81 to engage the teeth of said rack 78. Said plunger 80 has the knob 82 provided with the stud 83, normally fitted in the socket 84 in said frame 3, as shown in Fig. VI, so that said plunger 80 may reciprocate to successively engage the teeth of said rack 78, when the drum is turned, without releasing said stud 83 from its socket. However, when it is desired to turn said drum freely; said plunger 80 may be rendered inoperative by withdrawing it until said stud 83 is freed from its socket, and then turning the knob 82 until said stud is presented against the plane face of said plate 3.

The devices above described may be cooperatively employed as follows:—Type 36 are stored in the font spaces 35 in the case, in accordance with the characters which they bear, as indicated by the index plates 85; said type resting upon the abutments 39 as shown in Figs. III and IV. The composition is then made with the type picked from their respective spaces by the composing stick aforesaid; the lines of type being successively transferred from said stick to the spaces 71, in the flexible chase carried by the drum; and the latter being turned step by step to successively present said spaces in vertical alinement with the axis of the drum. When the desired number of lines of type have been inserted in the chase, the latter may be removed from the drum by turning the hook frame 51 in the drum, in the direction opposite to the arrow shown in Fig. V, by the handle 86 so that said chase plates may be lifted from their hooks and the chase unwrapped from the drum to be stored in plane position or wrapped upon a printing drum. When it is desired to redistribute in the case, type which have been used in said chase, the latter is returned to its position on the drum, as shown in Figs. I and V, and, the lines of type in the chase are successively slid into the composing stick and from the latter are dropped one by one into their respective spaces 35 between the rails of the corresponding banks 7, 8 and 9. Such redistribution

is conveniently effected by the operator while supporting his hand upon the rest plate 5, shown in Figs. I and II, and bringing the stick into alinement with one space after another. It will be noticed from Fig. II that the bars 38 at their upper ends are beveled or cut off vertically at the rear. This enables easy distribution into the channel by a downward movement of such a distributing tool as shown in my Patent No. 955,534, granted April 19, 1910. In such movement the beveled upper end of the bars 38 act as forks, removing the type from the distributing tool. The spaces 35 are respectively identified with the characters of the type for which they are intended, by the index plates 91, which as shown in Fig. II, are normally presented in front of the respective banks 7, 8 and 9. Said plates 91 being conveniently supported by the levers 93 pivoted at 94 in the standards 1 and 2; may be upturned to afford better access to said spaces 35 for removal of misplaced type.

I do not desire to limit myself to the precise details of construction and arrangement above described as it is obvious that various modifications may be made therein without departing from the essential features of my invention as defined in the appended claims.

I claim:—

1. In a type case, the combination of a series of banks one behind the other, each bank consisting of parallel channel bars, and means for holding them, said bars being beveled on their rear sides at their upper ends to enable convenient distribution of type thereinto.

2. In a type case, the combination of a series of banks one behind the other, each bank being located in inclined position, one bank above and in front of the other in such way that the lower ends of the banks are in a substantially vertical plane while the upper ends of the banks are in a substantially horizontal plane, the said upper ends being beveled to enable distribution into them and each bank being longer than the one in front thereof.

3. In a type case, the combination, with

parallel rails, of an abutment plate comprising a series of parallel ridges with grooves between them which the rails occupy, spaces in alinement with said ridges of greater width than the latter, and tapered abutments in alinement with said ridges and spaces, constituting means preventing the passage of type from said spaces in the direction of the length of said rails.

4. In a type case, an abutment plate comprising a series of parallel ridges with grooves between them, rails seated in said grooves, spaces in alinement with said ridges, and abutments in alinement with said ridges and spaces, constituting means preventing the passage of type from said spaces in the direction of the length of said rails.

5. In a type case, the combination, with a plurality of panels comprising parallel type channels, of index plates respectively local to said panels, and means supporting said plates, whereby they may be raised and lowered with respect to said panels.

6. In a type case, the combination with upright end plates, of a plurality of panels of type channels held between the end plates, and a frame hinged to the end plates and carrying indices corresponding to the various type channels.

7. In a type case, the combination, with the frame, of a series of type channels held thereby, said series comprising parallel bars and cross bars on which they are mounted and by which they are held in definite relation, means in the inner side of the frame for slidably engaging and supporting the cross bars, one of said cross bars being adjacent to the lower ends of the parallel bars and extending below such ends, and having on its forward side integral projections which stand in alinement with the space between adjacent parallel bars.

In testimony whereof I have hereunto signed my name at Burlington, New Jersey, this twenty-third, day of June, 1908.

SAMUEL A. NEIDICH.

Witnesses:

PEARL HARTZELL,
HELEN MURRAY.