

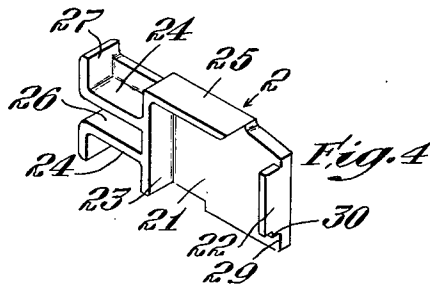
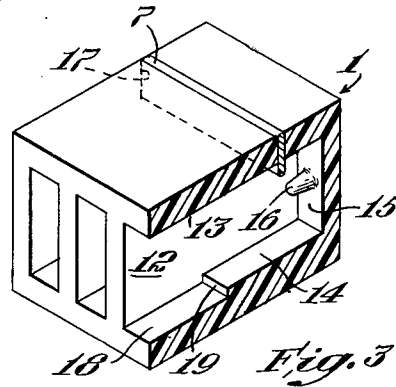
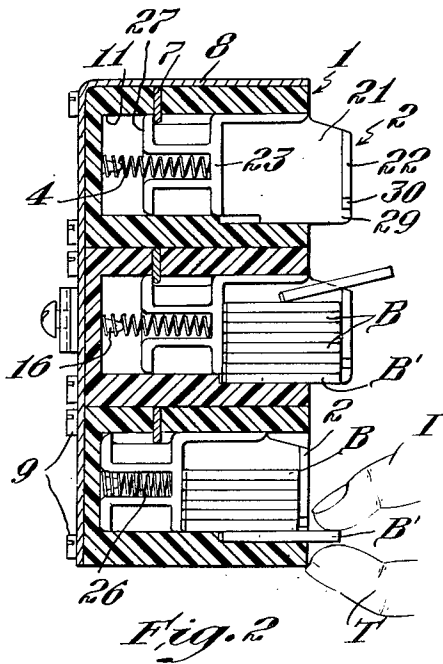
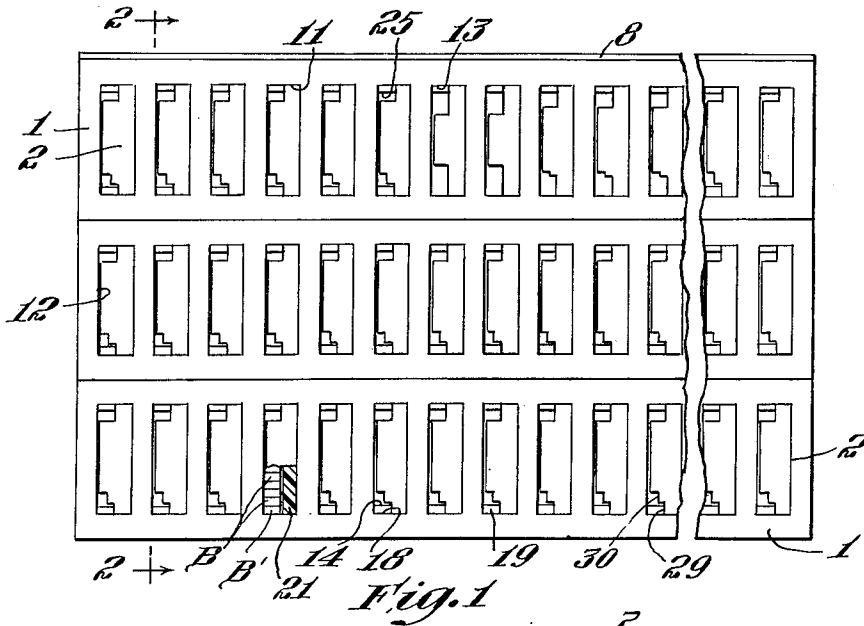
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TYPE DISPENSER

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TYPE DISPENSER

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This invention relates to type dispensers and more particularly to the character of type dispenser customarily used in conjunction with manual type-setting in which desired pieces of type or type bars of different denominations must be individually selected by the operator and inserted into a composing stick.

One object of the present invention is to provide a simplified dispenser with a minimum of moving parts which will efficiently and accurately introduce into the fingers of the operator a desired piece of individual type properly positioned and ready for insertion into a composing stick. Another object is to provide an easily assembled dispenser whose parts are susceptible to economical manufacture according to modern plastic molding practices.

In one aspect the type dispenser comprises a casing having a recess open at one end, a carriage adapted to slide back and forth in the recess, the carriage normally being held in an advanced position by a spring with its forward end projecting from the open end of the recess and being limited in forward movement by a stop which holds the carriage in advanced position, the carriage having a vertical passageway in the direction of movement of the carriage being approximately equal to the length of the type bars, the carriage passageway being open at its bottom so that the stack of type bars rests on the bottom of the casing recess, the casing having a shoulder behind the lowermost bar in the stack to obstruct rearward movement of the lowermost bar when the carriage is pushed back against the action of the spring, the forward end of the carriage clearing the lowermost bar so that it is left projecting when the carriage is retracted. More specifically the shoulder is formed by a depression at the forward end of the casing recess, the depression being deep enough to hold the type bar below the bottom of the carriage, so that the lowermost bar rests in the depression so as to be cleared by the carriage and left projecting when the carriage is retracted.

In a further aspect the passageway for the type bars is bounded by carriage walls on the front, back and one side, and by the surface of the casing recess throughout the rearward portion of its other side.

For the purpose of illustration a typical embodiment of the invention is shown in the figures in which

Fig. 1 is an elevation of the type dispenser;

Fig. 2 is a section on lines 2—2 of Fig. 1;

Fig. 3 is an isometric view showing details of the dispenser casing; and

Fig. 4 is an isometric view showing the type bar carriage.

As shown in Fig. 1 the type dispenser comprises three banks of dispenser units or casing blocks 1 and carriages 2 for dispensing type bars carrying the various digits and letters of the alphabet. The carriages 2 slide in recesses 11 formed in the casing block 1. The casing, which may be of a unitary molded construction has on the rear wall 15 of each recess a small protuberance for positioning one end of a helical spring 4. The casing blocks are held in a stack by a bracket 8 to which the blocks are attached by screws 9.

The type bar carriage 2, which is also preferably of unitary molded construction comprises a longitudinal side wall 21 which, with a front wall 22 and a rear wall 23, forms a vertical passageway for type bars B, the passageway being bounded at the open side of the carriage by a side wall 12 of the casing recess. As shown in Figs. 1 and 2 the passageway so formed is of such width and

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length as to receive the type bars in a stack. Rearwardly of the stack wall 23 of the passageway are extensions 24 forming a pocket 26 for receiving and supporting one end of the spring 4 which urges the carriage forwardly. A stop bar 7 fits in a slot 17 at the top of each of the casing blocks 1 and the upper extension 24 of the carriage has an abutment 27 adapted to engage the stop bar 7 and limit forward movement of the carriage. The carriage has an upper wall 25 providing a surface for guiding the carriage and the recess of the casing. The forward wall 22 of the carriage, and the forward end of the upper wall 25 are cut away to provide an entrance for stacking type bars in the carriage. The lower end of the front wall 22 is cut away to provide an exit opening 29 for the type bars. As shown in Fig. 2 the carriage 21 is normally urged by the spring 4 to an advanced position limited by the stop bar 7 in which the front wall 22 and part of the side wall 21 projects from the open end of the casing. As shown in the middle unit of Fig. 2 the type bars may be placed in the carriage passageway through the entrance at the top of the front wall 22. When stacked in the passageway they are confined by the front wall 22 and the rear wall 23 in a position slightly forward of a shoulder 19 formed between the bottom wall 14 of the casing and the recess 18. When the carriage 2 is in the advanced position illustrated by the middle and upper unit of Fig. 2, the lowermost type bar B' rests in the recess 18 forwardly of the shoulder 19.

The dispenser is operated by pushing the carriage rearwardly with the index finger I. The carriage front wall 22 thereupon urges all but the lowermost bar rearwardly, the lowermost bar being directed toward the exit opening 29. The depth of the recess 18 and shoulder 19 are such that the shoulder 19 engages the lowermost type bar B' only, the lowermost bar supporting the rest of the bars B so that they pass rearwardly with the carriage 2 as illustrated by the lower unit of Fig. 2. When the carriage 2 is in the retracted position illustrated by the lower unit of Fig. 2 the lowermost type bar B' projects through the opening outside the casing and carriage in a position where it may be easily gripped by the index finger and thumb of the operator. Occasionally the lowermost bar B' may be tipped so that it cannot pass through the exit 29. For this reason a notch 30 is provided to allow the bar to be removed while on its edge, after being pushed into alignment with the notch with a pencil or the like.

As can be readily seen by the foregoing description the present type dispenser is of utmost simplicity, each unit comprising only two moving parts, the carriage 2 and spring 4. Both the carriage 2 and casing block 1 may be easily molded from any suitable and attractive plastic material in units which may be assembled in any desired number to meet the typographical requirements of the printer.

While I have shown a particular embodiment of the invention it should be understood that the embodiments disclosed are for the purpose of illustration only and that this invention includes all modifications and equivalents which fall within the scope of the appended claims in which the recesses in casing blocks 1 are referred to as cabinet compartments, the carriages 2 as type holders and the passageways in the carriages as type chambers.

I claim:

1. A type dispenser comprising a cabinet having a row of compartments open at the front, a type holder sliding into each compartment from the front for holding a stack of type bars, spring means pushing the holders forwardly, each holder having a forwardly directed shoulder, one side of each compartment having an opening therethrough, and stop means extending through said openings in front of said shoulders to limit the extent to which the spring means can push the holders out of the compartments, each holder having a type chamber at its forward end to receive a stack of type bars, the length of each chamber in the direction of holder movement being approximately equal to the length of the type bars and the forward portion of the holder being disposed outside the cabinet when the holder is in forward

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position, said chamber being open at the bottom so that the stack of type bars rests on the bottom of the compartment and the compartment having a shoulder behind the lowermost bar in the stack to obstruct rearward movement of the lowermost bar when the holder is pushed back against the action of said spring means, the front of each holder having an opening at the bottom through which the lowermost bar projects when the holder is pushed back.

2. A type dispenser comprising a cabinet having a row of compartments open at the front, a type holder sliding into each compartment from the front for holding a stack of type bars, spring means pushing the holders forwardly, each holder having a forwardly directed shoulder, the dispenser having a slot extending lengthwise of said row and communicating with each compartment, and an elongate stop disposed in said slot in front of said shoulders to limit the extent to which the spring means can push the holders out of the compartments, each holder having a type chamber at its forward end to receive a stack of type bars, the length of each chamber in the direction of holder movement being approximately equal to the length of the type bars and the forward portion of the holder being disposed outside the cabinet when said chamber is in forward position, the holder being open at the bottom so that the stack of type bars rests on the bottom of the compartment and the compartment having a shoulder behind the lowermost bar in the stack to obstruct rearward movement of the lowermost bar when the holder is pushed back against the action of said spring means, the front of each holder having an opening at the bottom through which the lowermost bar projects when the holder is pushed back.

3. A type dispenser comprising a cabinet having a row of compartments open at the front, a type holder sliding into each compartment from the front for holding a stack of type bars, spring means pushing the holders forwardly, each holder having a forwardly directed shoulder, one side of each compartment having an opening therethrough, and stop means extending through said openings in front of said shoulders to limit the extent to which the spring means can push the holders out of the compartments, each holder having a type chamber at its forward end to receive a stack of type bars, the length of each chamber in the direction of holder movement being approximately equal to the length of the type bars and the forward portion of the holder being disposed outside the cabinet when the holder is in forward position, said chamber being open at the bottom so that the stack of type bars rests on the bottom of the compartment and the compartment having a shoulder behind the lowermost bar in the stack to obstruct rearward movement of the lowermost bar when the holder is pushed back against the action of said spring means, the front of each holder having an opening at the bottom through which the lowermost bar projects when the holder is pushed back, and said opening being L-shaped to receive the lowermost bar when lying either on its side or on edge.

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ward position, said chamber being open at the bottom so that the stack of type bars rests on the bottom of the compartment and the compartment having a shoulder behind the lowermost bar in the stack to obstruct rearward movement of the lowermost bar when the holder is pushed back against the action of said spring means, the front of each holder having an opening at the bottom through which the lowermost bar projects when the holder is pushed back, and each chamber being open on one vertical side so that it can be loaded from that side when the holder is removed from its compartment.

4. A type dispenser comprising a cabinet having a row of compartments open at the front, a type holder sliding into each compartment from the front for holding a stack of type bars, spring means pushing the holders forwardly, each holder having a forwardly directed shoulder, one side of each compartment having an opening therethrough, and stop means extending through said openings in front of said shoulders to limit the extent to which the spring means can push the holders out of the compartments, each holder having a type chamber at its forward end to receive a stack of type bars, the length of each chamber in the direction of holder movement being approximately equal to the length of the type bars and the forward portion of the holder being disposed outside the cabinet when the holder is in forward position, said chamber being open at the bottom so that the stack of type bars rests on the bottom of the compartment and the compartment having a shoulder behind the lowermost bar in the stack to obstruct rearward movement of the lowermost bar when the holder is pushed back against the action of said spring means, the front of each holder having an opening at the bottom through which the lowermost bar projects when the holder is pushed back, and said opening being L-shaped to receive the lowermost bar when lying either on its side or on edge.

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