June 17, 1930. A. O. ELMER 1,763,958

TYPE HOLDER

Filed Oct. 23, 1928

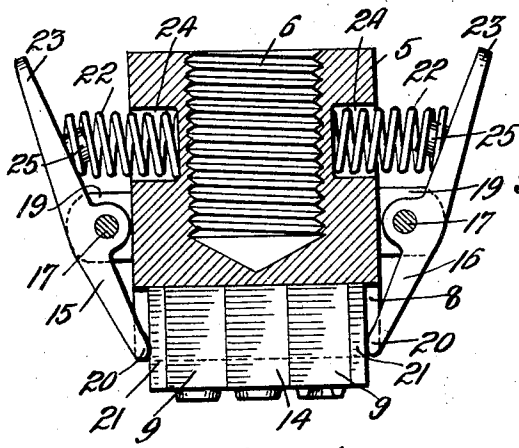


Fig. 1.

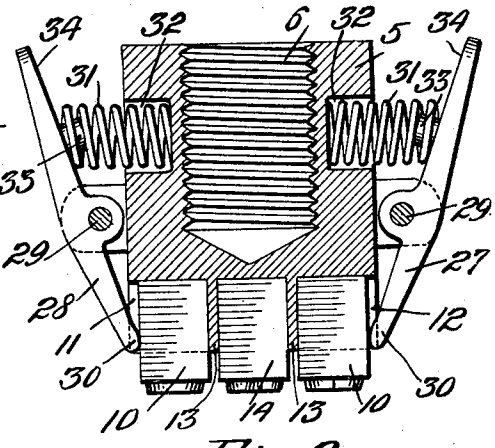


Fig. 2.

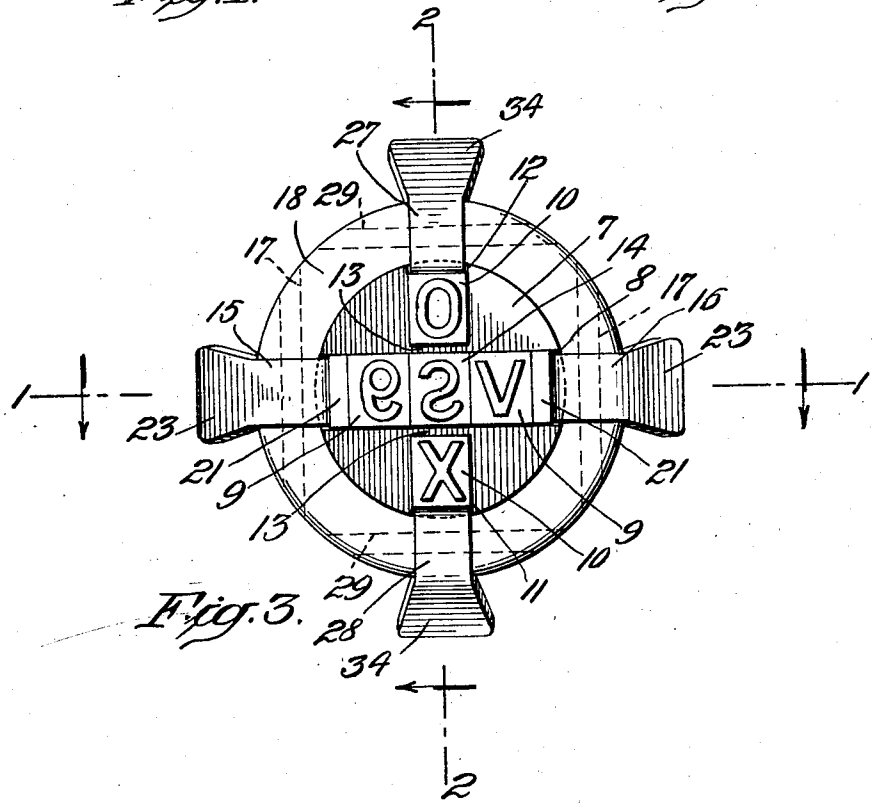


Fig. 3.

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UNITED STATES PATENT OFFICE

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TYPE HOLDER

Application filed October 23, 1928. Serial No. 314,432.

The invention relates to an improvement in type holders.

The invention has been developed in connection with providing suitable means for holding the pieces of type used for marking the cap sealing the central filling hole of cans for containing condensed milk. This cap usually consists of a flat circular central or bottom portion having upstanding side walls. The flat central or bottom portion is usually not more than seven-eighths of an inch or less in diameter. It has long been considered desirable in the manufacture and canning of condensed milk to mark the lot number of the milk contained in the can on the depressed bottom portion of the cap where it will be protected against rubbing or abrasion by the side walls of the cap. The problem has been to produce a type holder having means for securely but removably holding the required number of pieces of type within an area permitting them to be readily inserted within the walls of the cap to mark the lot number of the milk upon the flat depressed bottom of the cap. The improved type holder fully described hereinafter and particularly pointed out in the appended claims has been produced in answer to the problem. Although the type holder of the present invention has been developed and produced in connection with the problem of marking a special kind of can, it will be recognized that the improved type holder is suitable for marking any kind of can or other container where the letters, figures or other markings are required to be grouped within a certain prescribed area.

In the accompanying drawings illustrating the preferred form of the invention, Fig. 1 is a longitudinal section of the improved type holder taken along the line 1—1 of Fig. 3; Fig. 2 is a similar section taken along the line 2—2 of Fig. 3; and Fig. 3 is a bottom plan of the improved type holder.

As illustrated in the drawings the improved type holder comprises a cylindrical body portion 5 having in its upper side a threaded axial bore 6 by which it may be secured to the vertically acting spindle of the stamping or marking machine or other mechanism on which it is adapted to be employed. The lower end of the body portion 5 of the type holder is provided with two type receiving slots formed at right angles to each other and passing through the center of the bottom face 7 of the type holder. The slot 8 passes diametrically across the whole face of the lower end 7 of the type holder and receives therein the type pieces 9. The other slot for receiving the type pieces 10 is divided into two radial branches 11 and 12 which are separated at their inner ends from the central part of the slot 8 by the partition walls 13 of the lower end of the body portion 5 of the type holder. The central piece of type 14 occupies the point of intersection of the two rows of type and is held in the center of the slot 8. Although the illustrated type holder shows only five pieces of type arranged as a cross it will be understood that by using smaller type or by increasing the diameter of the type holder any desired number of pieces of type may be employed depending upon the requirements of the marking.

The pieces of type consist of a marking surface, either a letter or a figure, and a body portion which may conveniently be slightly oblong in cross-section, as indicated in the drawings. Being of uniform shape and size the pieces of type may be readily substituted one for another. And in this connection it will be noted that the slot or groove 8 has a width corresponding to the longer side of the body portion of the type pieces, whereas the slots or grooves 11 and 12 have a width corresponding to the shorter sides of the body portion of the type pieces. This manner of forming the body portion of the type pieces facilitates the proper placing and alinement of the type pieces in their respective slots.

The type pieces occupying the groove 8 are held in position therein by means of two clamps 15 and 16 pivoted at 17 in an annular rib or web 18 extending outwardly from the body portion 5 of the type holder. The

clamps 15 and 16 are loosely received in the slots 19 cut longitudinally in the rib 18. The type engaging ends 20 of the clamps 15 and 16 are forced into engagement with the filler pieces 21 by means of the springs 22 interposed between the upper end of the body portion 5 of the type holder and the tail or handle portions 23 of the clamps. The inner ends of the springs 22 occupy the holes 24 formed in the body portion 5 of the type holder and the outer ends of the springs encircle the bosses 25 extending inwardly from the inner faces of the handle portions 23 of the clamps. The filler pieces 21 are interposed between the end pieces 9 of the type and the clamping ends 20 of the clamps.

The type pieces occupying the short radial grooves 11 and 12 are held in position therein by means of the clamps 27 and 28 pivoted at 29 in the annular rib 18. The clamping end 30 of each clamp 27 and 28 directly engages the outer sides of the type pieces 10 and force them against the partition walls 13, thereby securely holding them in place. The clamps 27 and 28 are actuated by the springs 31 the inner ends of which are received in the holes 32 in the body portion 5 of the type holder and the outer ends of which loosely embrace the bosses 33 extending inwardly from the inner faces of the tail or handle portions 34 of the clamps 27 and 28.

The improved type holder as described above is adapted for use in any preferred position, inasmuch as the type pieces are securely held in the holder by means of the spring pressed clamps. However, the machine on which the type holder illustrated in the drawings is used is provided with a vertically operating spindle which forces the type holder downwardly onto the cans and for that reason the type holder is shown and described in that position. To remove the row of type pieces occupying the groove 8 it is simply necessary to press inwardly on the tail or handle portions 23 of the clamps 15 and 16. When the old type pieces have been removed and replaced by the new ones the latter will be held firmly in position in the groove 8 when the clamps are released and the clamping ends 20 thereof move into engagement with them. And in like manner the type pieces occupying the short grooves 11 and 12 may be taken out and replaced by new type pieces by manipulating the clamps 27 and 28. By reason of the compact arrangement of the type pieces in the face of the body portion 5 of the type holder and the novel arrangement of the clamps for holding the type pieces in position, the improved type holder of the present invention is adapted to operate efficiently in relatively restricted areas.

Having thus described the invention what I claim as new is:—

1. A type holder comprising, a body portion adapted for attachment to a stamping mechanism, the outer end of said body portion being provided with a transverse type receiving slot extending across the end of the body portion and two radial type receiving slots, one on one side and the other on the other side of the transverse slot and separated therefrom by partitions formed of the body portion, type pieces received in the slots, and spring pressed clamps for removably holding the type pieces in the slots.

2. A type holder comprising, a cylindrical body portion provided at one end with means for attachment to a stamping mechanism and provided at the other end with type receiving slots arranged transversely of each other, type pieces adapted to be received in the slots, a series of clamps pivoted to the body portion for engaging and holding the type pieces in the slots, and springs interposed between the body portion and the clamps for yieldingly holding the type engaging ends of the clamps against the type pieces.

3. A type holder comprising, a cylindrical body portion provided at one end with means for attachment to a stamping mechanism and provided at the other end with one transverse slot extending entirely across the body portion and with two slots arranged at right angles to the transverse slot and separated therefrom by partitions formed of the body portion, type pieces received in the slots, an annual rib on the body portion, four clamps pivoted in the annular rib, and a series of springs interposed between the body portion and the adjacent ends of the clamps for yieldingly forcing the other ends of the clamps into engagement with the type pieces.

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