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(54) **A distributor of boxed products such as packets of cigarettes**

Ein Verteiler von geschachtelten Produkten wie Zigarettenspackungen

Un distributeur de produits enfermés dans une boîte tels que des paquets de cigarettes

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Description

DISCLOSURE

[0001] This invention is concerned with a distributor of boxed products such as packets of cigarettes, boxes of sweetmeat, and similar block-shaped products, for installation at tobacconists and other sales points, preferably in association with the sales counter.

[0002] Tobacconists have stored packets of cigarettes for sales as stacks placed on shelves located behind the sales counter. Due to the small size of the packets of cigarettes and to the large number of brands and kinds found on the market, the front space required for accommodating all the products is very large, although the depth taken is small.

[0003] Moreover, since the shelves are located behind the counter, at each customer's request the salesperson has to turn to the shelf, pick the required product, and turn back toward the counter to deliver it to the customer. Such maneuver, which is repeatedly performed over the day, is not only tiresome for the salesperson, but also slows up the sales operations, lengthening the customers' waiting times at rush hour. Finally, the salesperson is compelled to frequently turn his eyes away from the sales counter, thereby offering a chance to malingers for stealing from the products which are usually on display on the counter. The same situation is true also in relation to other products of similar size and shape, such as block-shaped boxes of sweetmeat, chocolates, which are also often sold by tobacconists.

[0004] A cigarette dispenser of the free standing variety is described in EP 0 695 528.

[0005] It is therefore a main object of the invention to provide a distributor of boxed products such as packets of cigarettes, boxes of sweetmeat, and similar block-shaped products, for installation at tobacconists, stalls and other sales points in lieu of shelves or cases as known heretofore, in order to accommodate, with good efficiency, a large number of packets of cigarettes in different sizes, and which will spare the salesperson having to turn his back to the counter in order to pick each time the product requested by the customer.

[0006] The invention achieves the above and other objects and advantages, such as will appear from the following disclosure, with a distributor of boxed products, particularly packets of cigarettes, and having the features recited in claim 1.

[0007] Other advantageous features are recited in the dependent claims.

[0008] The invention is further disclosed below, with reference to a preferred embodiment shown, by way of nonlimiting example, in the attached drawings, wherein:

Fig. 1 is a perspective, exploded view of a distributor of packets of cigarettes according to a preferred embodiment of the invention;

Fig. 2 is an end view, to an enlarged scale, of a detail of Fig. 1, in the direction of arrow II;

Fig. 3 is a view in vertical, longitudinal cross-section, to an enlarged scale, of a magazine of packets of cigarettes used in the distributor of Fig. 1;

Fig. 4 is a plan view from above of the magazine of Fig. 3; and

Fig. 5 is another perspective, exploded view of the distributor of cigarettes of Fig. 1, in a different mode of installation.

[0009] With reference to Fig. 1, two tubular uprights 10, 12 are vertically attached to a sales counter 14 of a tobacconist, by means of attachment flanges and counterflanges 16, 18 and of bolts such as 20, 22. Respective rods 24, 26 are received in the tubular uprights, which can be blocked at a desired height by screws (not shown) engaged in holes such as 28, 30. Rods 24, 26 are braced with crosspieces 32 to build a stiff frame. Each of crosspieces 32 carries a respective channel 34, as shown to an enlarged scale in the detail view of Fig. 2, which shows a crosspiece 32 in transverse cross-section. Channel 34, of a section commonly known as "hat", has two skirts 35, 37, defining, together with crosspiece 32, upward and downward slots, respectively.

[0010] Having now reference also to Figs. 3 and 4, a magazine 36 for packets of cigarettes, which is part of the distributor of the invention, comprises a main metal sheet bent in a C-shape to define two side walls 40, 42, which are joined by a transverse back wall 44, with end ledges 46. Further, a plurality of welded, transverse partitions such as 48, which extend between both side walls 40, 42, and are parallel to back wall 44, define a plurality of shafts or chutes 50, 52, 54, 56, which are adapted to contain respective stacks of superimposed packets of cigarettes, as shown with 58.

[0011] Side sheets 40, 42 are preferably lightened by windows 60. Moreover, they are staggered at their bottom end, so that the bottom ends of shafts 50, 52, 54, 56 are also staggered, and are further provided with respective horizontal plates 62, 64, 66, 68, which partially shut the bottom end of the respective magazine, whereby they retain the stacked packets while allowing them to be transversely withdrawn, one by one. Preferably, the height of a magazine is designed so that each shaft can accommodate the equivalent of an entire carton of packets of cigarettes.

[0012] Two spaced hooks 70, 72 are welded to back wall 44. Hooks 70, 72 comprise bent metal plates, which can be inserted in the slots defined by skirts 35. As it can be seen on Fig. 1, a number of magazines are hung side by side, up to the entire width of the crosspieces, building up a loading capacity (depending on the frame width) of several tens or even of a hundred different brands and types of cigarettes.

[0013] It will be appreciated that the salesperson at the counter can quickly pick the requested packet without having to move or turn. Whenever one of the shafts is empty, it can be easily reloaded by dropping from above one or more stacks of packets taken out of a carton, either by momentarily unhooking the magazine, or by climbing on a stool or small ladder.

[0014] It is known that the packets of cigarettes are substantially standardized to a few different sizes, depending on the number and length of the cigarettes. In practice, therefore, the magazines may be provided in only a few models, which are substantially identical in structure, but having different widths and depths of the shafts, possibly with reduction of the shafts from four to three in the case of the deeper shafts. The mode of hanging allows the different models to be hung freely, independently of their widths.

[0015] Fig. 5 shows how the distributor of the invention may be installed hanging above the counter and without any connections to it, where it is desired to keep the entire surface of the counter free. The frame is substantially the same as shown on Fig. 1, but is capsized and attached to the ceiling (rather than to the counter) by means of tassels 80. In this case, the magazines will be hung onto skirts 37 of crosspieces 32 rather than onto skirts 35.

[0016] A preferred embodiment of the invention has been described, to which, however, numerous changes may be made, such as will be evident for the person skilled in the art, within the scope of the claims. In particular, it should be noted that, although the preferred embodiment concerns a distributor of packets of cigarettes, the same distributor is equally applicable to boxes of cigars, and to boxed products generally, such as sweetmeat, medicines, and the like, so long as their packages are small and block-shaped.

Claims

1. A distributor of boxed products, particularly of packets of cigarettes, comprising

a frame (24, 26, 32, 34) adapted to be attached above a sales counter and having a set of at least two horizontal slots (32, 35, 37);

a plurality of magazines (36) for boxed products, hanging side by side from said slots, each magazine comprising a plurality of vertical, side-by-side shafts or chutes (50, 52, 54, 56), aligned in a direction at right angles to the slots, of sizes adapted to contain respective stacks of boxed products, and open at the bottom at heights staggered upwardly starting from the shaft near the frame, and provided with retaining plates (62, 64, 66, 68), whereby the boxed products are prevented from dropping, but are

allowed to be pulled out laterally one by one.

2. The distributor of boxed products of claim 1, **characterized in that** said frame comprises at least two crosspieces (32) carrying said slots, and extending between two vertical rods (24, 26) which are inserted in an adjustable degree in respective tubular uprights (10, 12) provided with flanges (16, 18) for attachment to a horizontal surface.
3. The distributor of boxed products of claim 1 or 2, **characterized in that** said frame has two sets of slots (32, 35, 37) opening to opposite directions, whereby said tubular uprights are attachable either to the top surface of a counter or to the ceiling, so that in each case said magazines can be hung.
4. The distributor of boxed products of one of claims 1 to 3, **characterized in that** the magazines (36) have different widths, depending on the size of the products.
5. The distributor of boxed products of one of claims 1 to 4, **characterized in that** the magazines (36) are of metal sheet.

Patentansprüche

1. Verteiler von geschachtelten Produkten wie Zigarettenpackungen, der die folgenden Teile aufweist:

ein über einem Ladentisch installierbares Gestell (24, 26, 32, 34) mit einem Satz von mindestens zwei horizontalen Nuten (32, 35, 37); eine Mehrheit von nebeneinander von den Nuten hängenden Magazinen (36) für geschachtelte Produkten, wobei jedes Magazin eine Mehrheit von vertikalen, nebeneinander senkrecht zu den Nuten ausgerichteten Schächten (50, 52, 54, 56) umfaßt, die bemessen sind, um bezüglichliche Stapel von geschachtelten Produkten zu enthalten, und die unten an vom gestellnahen Schacht ausgehend nach oben versetzten Höhen offen sind, und die mit Halteplatten (62, 64, 66, 68) versehen sind, die das Fallen der geschachtelten Produkte verhindern aber deren seitliche, individuelle Ausziehung gestatten.

2. Verteiler von geschachtelten Produkten nach Anspruch 1, **dadurch gekennzeichnet, daß** das Gestell aus mindestens zwei, die genannten Nuten aufweisenden und sich unter zwei vertikale Stangen (24, 26) erstreckenden Querträgern (32) besteht, wobei die vertikalen Stangen einstellbar in bezüglichlichen, röhrenförmigen Ständern (10, 12) eingesetzt sind, die für Befestigung an einer horizon-

tales Fläche mit Anbauflanschen (16, 18) ausgestattet sind.

3. Verteiler von geschachtelten Produkten nach Anspruch 1 oder 2, **dadurch gekennzeichnet, daß** das obengenannte Gestell zwei Sätze von sich in entgegengesetzten Richtungen öffnenden Nuten (32, 35, 37) aufweist, wobei die genannten röhrenförmigen Ständer sowohl an der Oberfläche eines Ladentisches als an der Zimmerdecke befestigbar sind, so daß die genannten Magazine in jedem Fall anhängbar sind. 5
4. Verteiler von geschachtelten Produkten nach einem der Ansprüche 1 zu 3, **dadurch gekennzeichnet, daß** die Magazine (36) verschieden weit sind, gemäß der Größe der Produkte. 10
5. Verteiler von geschachtelten Produkten nach einem der Ansprüche 1 zu 4, **dadurch gekennzeichnet, daß** die Magazine (36) aus Blech gebildet sind. 15

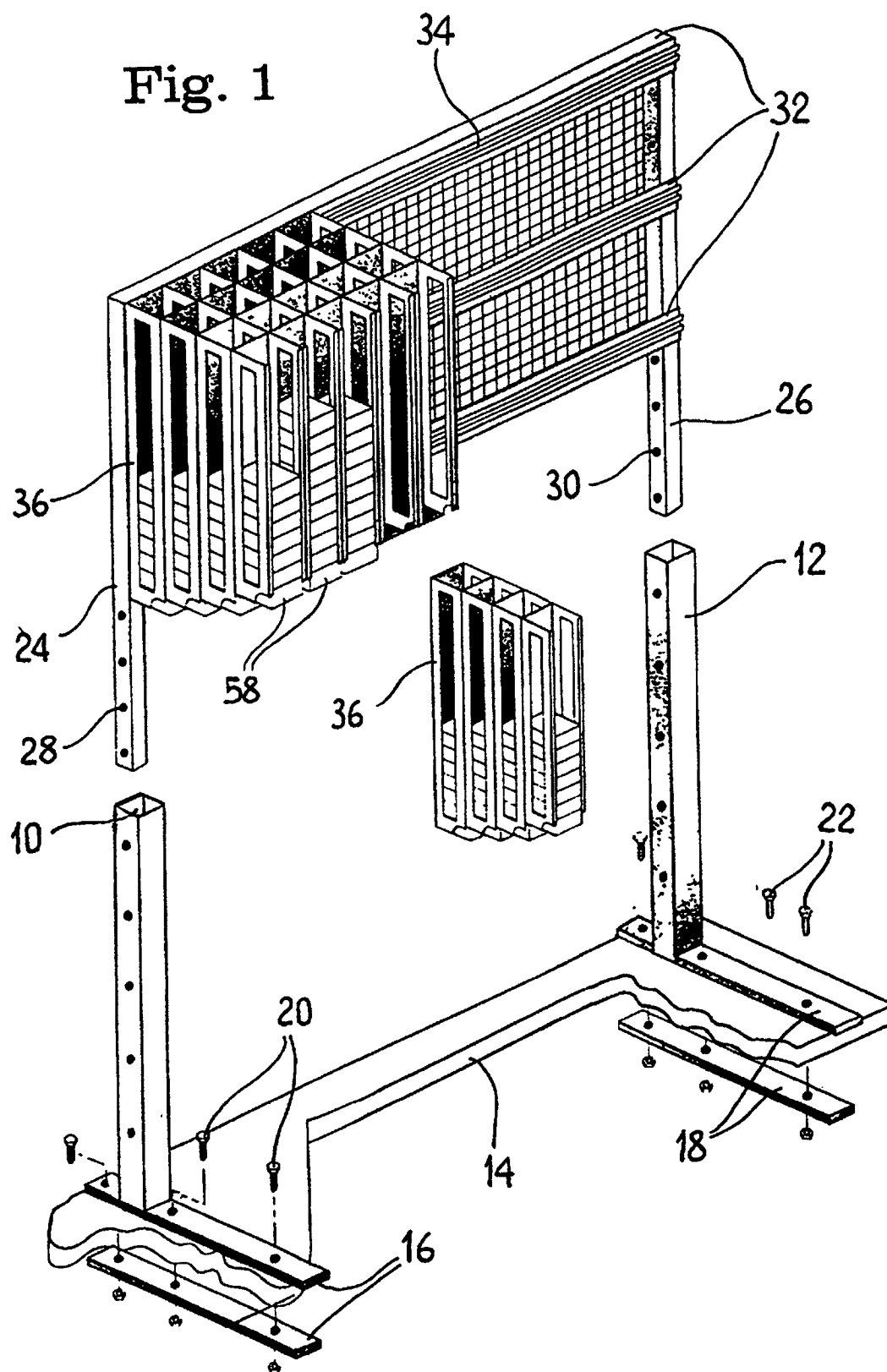
35, 37) s'ouvrant en des directions opposées, de manière que lesdites colonnes tubulaires puissent être attachées soit à la surface supérieure d'un comptoir, soit au plafond, en admettant dans les deux cas l'accrochage desdits chargeurs.

4. Distributeur de produits enfermés dans une boîte selon une des revendications 1 à 3, **caractérisé en ce que** les chargeurs (36) ont des largeurs différentes, en relation à la taille des produits en boîte.
5. Distributeur de produits enfermés dans une boîte selon une des revendications 1 à 4, **caractérisé en ce que** les chargeurs (36) sont en tôle. 20

Revendications

1. Distributeur de produits enfermés dans une boîte, tels que des paquets de cigarettes, comprenant : 25
 - un châssis (24, 26, 32, 34) susceptible d'être monté au dessus d'un comptoir et ayant un jeu d'au moins deux gorges horizontales (32, 35, 37); 30
 - une pluralité de chargeurs (36) de produits en boîte, qui sont accrochés côte à côte auxdites gorges, chaque chargeur comprenant une pluralité de puits ou goulottes verticales côte à côte (50, 52, 54, 56), alignées en direction perpendiculaire aux gorges, dimensionnées pour contenir des piles respectives de produits en boîte, et ouvertes inférieurement sur des hauteurs décalées vers le haut à partir du puits at- 40
 - tenant au châssis, avec des plaques de butée (62, 64, 66, 68), qui empêchent que lesdits produits en boîte tombent, tout en permettant qu'ils puissent être enlevés latéralement un à la fois. 45
2. Distributeur de produits enfermés dans une boîte selon la revendication 1, **caractérisé en ce que** ledit châssis comprend au moins deux barreaux (32) présentant lesdites gorges et s'étendant entre deux tiges verticales (24, 26) qui sont insérées en mesure réglable dans des respectives colonnes tubulaires (10, 12) équipées de flanges (16, 18) de fixation à une surface horizontale. 50
3. Distributeur de produits enfermés dans une boîte selon la revendication 1 ou 2, **caractérisé en ce que** ledit châssis présente deux jeux de gorges (32, 55

Fig. 1



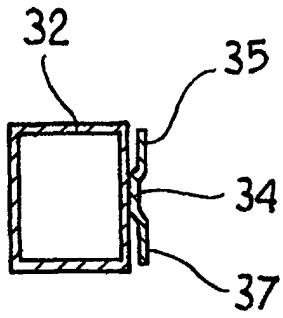


Fig. 2

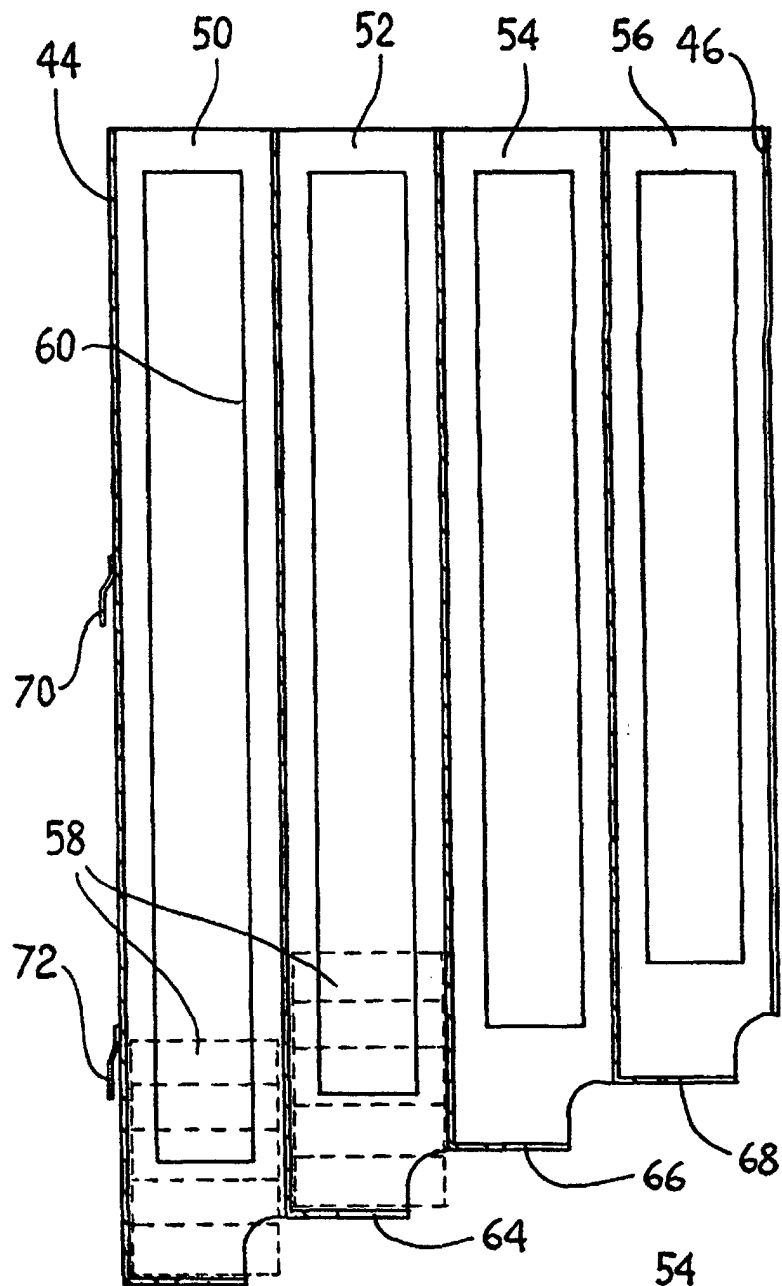


Fig. 3

Fig. 4

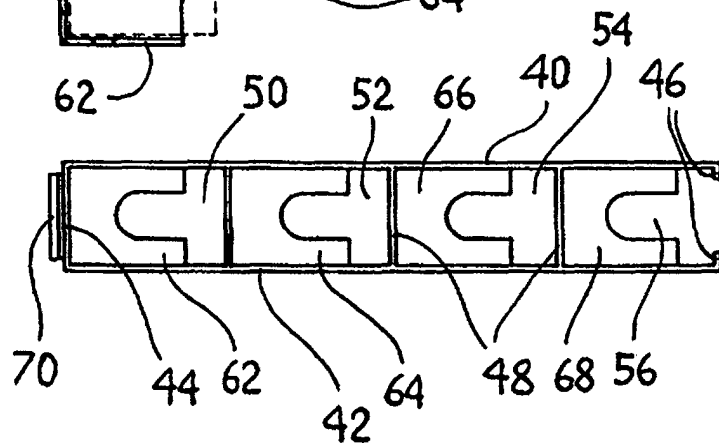


Fig. 5

