Oct. 21, 1952 D. W. MOLINS ET AL 2,614,703

RECEPTACLE

Filed March 21, 1950

Fig.2.

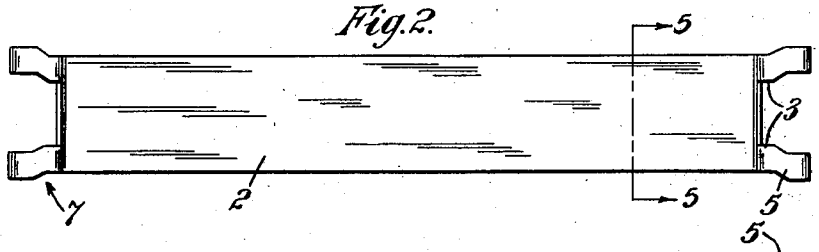


Fig.1.

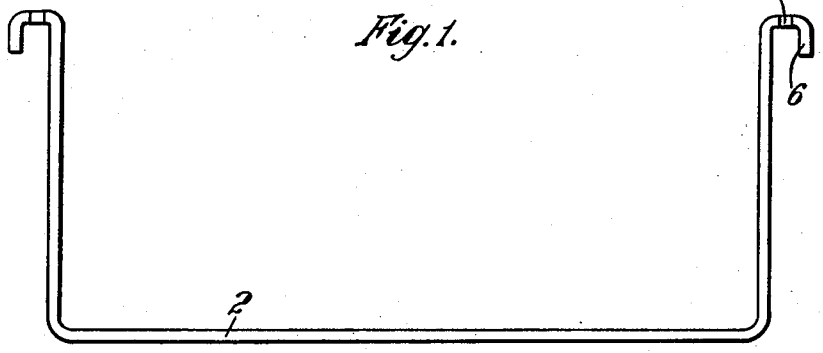


Fig.6.

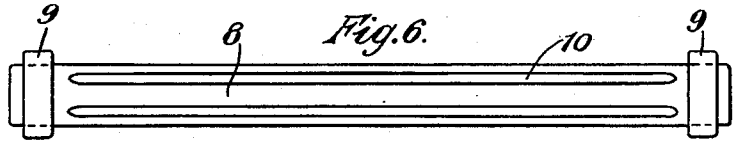


Fig.5.

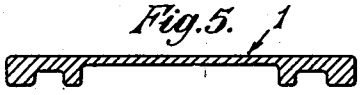


Fig.3.

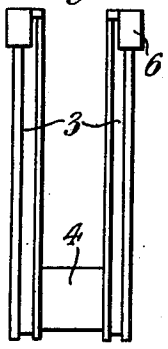


Fig.4.

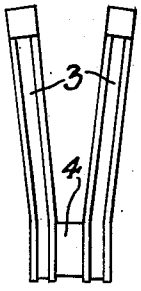


Fig.7.

INVENTORS
D.W. Molins, F.F. Reuss,
N.W. Jackson & C.B. Bruce
By Watson, Cole, Grindle & Watson

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RECEPTACLE

Desmond Walter Molins, Felix Frederic Ruau, Norman Walter Jackson, and Cyril Graham Bruce, Deptford, London, England, assignors to Molins Machine Company Limited, London, England, a British company

Application March 21, 1950, Serial No. 150,842
In Great Britain September 9, 1949

3 Claims. (Cl. 211—114)

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This invention concerns receptacles such for example as the trays used for holding several thousands of cigarettes.

In the manufacture of cigarettes it is useful to collect cigarettes issuing from the cigarette-making machine in receptacles. Various kinds of such receptacles are in use and the present invention related to receptacles of the kind which comprise simply a base and upstanding end walls which are slotted, at least at the upper part, the bifurcated ends of the said upstanding end walls being bent to form hooks at the ends of the receptacles. It is desired to provide such a receptacle with a projection or projections serving as a spacing member to space receptacles sideways from one another. It has been proposed to make such projections by perforating the material forming the top member of a hook by a pinching operation which spreads the material at the side of the hook and it is desired to avoid this operation.

According to the present invention there is provided a receptacle of the kind referred to wherein a projection is provided by bending, twisting or distorting a limb of the forked part so that said distorted part lies beyond the plane common to the base and end walls before such distortion. For example, a fork limb may be bent away from its neighbour while still lying in a plane common to both. Or the hook at the top of a fork limb may be distorted by a bend or twist so that the material towards its free end lies beyond the aforesaid common plane.

A receptacle constructed according to the present invention will now be described by way of example with reference to the accompanying drawing, this receptacle being suitable for holding cigarettes.

In the drawings:

Figure 1 is a front elevation of the receptacle

Figure 2 is a plan of Figure 1

Figure 3 is an end elevation of Figure 1

Figure 4 is a perspective view of the receptacle

Figure 5 is a section of the material from which the tray is made, taken on lines 5—5 of Figure 2

Figure 6 shows a plan of a cover suitable for use with the receptacle

Figure 7 is a view similar to Figure 3 but showing a modification.

Referring first to Figure 5 of the drawings the receptacle shown in the other views is made from an extruded striplike length 1 of a suitable aluminium alloy. The cross section of said extruded strip consists of a thin medial portion joining two

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substantial side portions each of which is of channel cross-section all as shown in Figure 5. One surface of all three portions, however, is flush and forms the cigarette-supporting surface of a finished receptacle. This shape is chosen for economy in metal and also for lightness, the side portions being made substantial enough to give the necessary strength to the receptacles. In this particular example, the thin medial portion is $\frac{1}{16}$ inch thick, while the side portions are $\frac{1}{4}$ inch thick at their thickest parts and $\frac{1}{8}$ inch thick at their channelled parts. The width of the extruded blanks is $2\frac{15}{16}$ inches and each of the side portions is $\frac{5}{8}$ inch wide, the thin medial portion being $1\frac{1}{16}$ inches wide.

Referring now to Figures 1 to 4 a length of such material is formed into a receptacle by removing the thin medial portions from the ends thereof and bending it to form a base 2 and forked vertical end walls 3. The greater part of each vertical end wall is slotted, but the full extruded section extends up at 4 for a distance of about 1½ inches from the base. The upper ends of the slotted vertical walls or forked limbs 3 are bent outwardly at 5 and downwardly at 6 so as to form hooks extending endwise from each forked end of the receptacle. These hooks are useful for lifting and transporting the receptacles, and can be used for suspending the receptacles on rods during, for example, a cigarette conditioning process.

The free end of the upper part of each such hook is bent outwardly as indicated at 7 that is beyond the plane common to the base and the end walls prior to said bending and thus the bent out part of the hooks constitute projections for the purpose of spacing receptacles sideways from each other when a number of receptacles are arranged side by side. This is desirable, for example, during conditioning of cigarettes, in order to allow free circulation of air between the receptacles.

The receptacle made as described above are broadly similar in design to many receptacles which have been used for the collection of cigarettes. As the receptacles have no sides, inspection of the ends of cigarettes is easy. The forked or slotted end walls can accommodate a guide member to guide cigarettes into the receptacles, for example, in the automatic collection of cigarettes from a cigarette-making machine and it will be seen that the slot is considerably narrower than the length of an ordinary cigarette, so that the end walls can support cigarettes. A cover member of the kind illustrated in Figure

6 may be provided to keep the cigarettes in place and it may also serve to reinforce the receptacle laterally by fitting between the forks of the end walls, thus preventing distortion when receptacles are pushed laterally. The cover is made from a thin metal strip 8 and reinforced by pressing up curved ribs 10 as shown. Cross pieces 9 are fixed near the ends (as by welding) and these lie just inside the tray ends and locate the lid, the small parts of 8 projecting beyond the pieces 9 entering between the end forks.

In another construction, illustrated in Figure 7, the limbs of the forks are splayed or bent away from one another.

What we claim as our invention and desire to secure by Letters Patent is:

1. A cigarette receptacle comprising a base and two upstanding end walls, the upper part at least of each end wall comprising two upstanding limbs spaced apart from each other, each said limb comprising at its upper extremity a portion which is bent endwise of and away from the receptacle and also downwardly to form a hook, one at least of said limbs being distorted to form a projection extending outwardly sideways of the receptacle beyond a plane common to the edges of the base and end walls before such distortion.

2. A receptacle as claimed in claim 1 wherein

one of two limbs forming part of an end wall is bent away from the other of the two said limbs while still lying in a plane common to both.

3. A receptacle as claimed in claim 1 wherein the hook at the upper extremity of a limb is distorted so that the material toward the free end of the hook lies beyond a plane common to the edges of the base and the edges of the end walls excluding the said hook.

DESMOND WALTER MOLINS.
FELIX FREDERIC RUAU.
NORMAN WALTER JACKSON.
CYRIL GRAHAM BRUCE.

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