United States Patent [19]

Dawidowicz et al.

[11] **3,854,201**

[45] ***Dec. 17, 1974**

[54] **SYSTEM FOR DISPENSING RAZOR BLADE CARTRIDGES**

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[73] Assignee: **Warner-Lambert Company,** Morris Plains, N.J.

[*] Notice: The portion of the term of this patent subsequent to Nov. 13, 1990, has been disclaimed.

[22] Filed: **May 21, 1973**

[21] Appl. No.: **361,921**

Related U.S. Application Data

[60] Division of Ser. No. 270,138, July 10, 1972, Pat. No. 3,783,493, which is a continuation-in-part of Ser. Nos. 191,665, Oct. 22, 1971, Pat. No. 3,783,510, and Ser. No. 236,723, March 21, 1972, Pat. No. 3,785,051, and Ser. No. 258,682, June 1, 1972, abandoned.

[52] **U.S. Cl.** **30/40.2,** 30/50, 206/356, 206/511

[51] **Int. Cl.** **B26b 21/22,** A45d 27/24, B26b/21/24

[58] **Field of Search** ..... 30/40, 40.2, 50; 206/16 B, 206/511, 354, 355, 356; 220/23.6, 97 B

[56] **References Cited**

UNITED STATES PATENTS

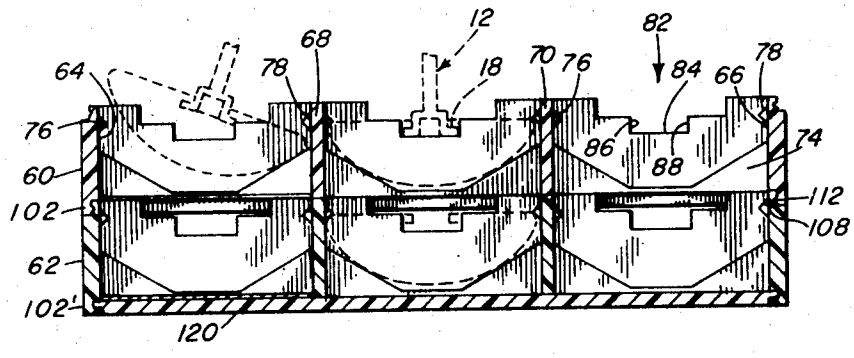
3,388,662	6/1968	Raureby	30/40 UX
3,388,831	6/1968	Hansom	30/40.2 X
3,424,334	1/1969	Goltz	220/23.6
3,771,223	11/1973	Dawidowicz	30/50 X
3,777,396	12/1973	Simonetti	30/50 X

Primary Examiner—Donald G. Kelly
Assistant Examiner—Gary L. Smith
Attorney, Agent, or Firm—James F. Powers, Jr.; Albert H. Graddis

[57] **ABSTRACT**

The specific embodiments provide a system for dispensing a plurality of razor blade cartridges comprising at least one dispenser having a longitudinal row of transverse cartridge chambers. Elements are provided in each one of the chambers for releasably maintaining a razor blade cartridge therein with engageable surfaces of the cartridge positioned for engagement by supporting surfaces on a holder. Guide elements are formed in a side wall of the dispenser unit to one side of each of the chambers for guiding the supporting surfaces of the holder into or out of engagement with the engageable surfaces of the cartridge. One of the cartridge chambers is empty, and the next successive chambers have unused cartridges therein. When an initial cartridge on the holder is no longer suitable for use, it is placed in the empty chamber, and the unused cartridge in the next successive chamber is used. Thereafter, each cartridge, when no longer suitable for use, is replaced in the chamber from which the cartridge was removed and the cartridge from the next successive chamber is removed for use until all the cartridges are successively removed from the dispenser unit. One of the specific embodiments provides for a second dispenser unit which is releasably connected to the first dispenser unit such that the guide means are inaccessible to the supporting surfaces of the holder until the first dispenser unit is disconnected therefrom.

4 Claims, 10 Drawing Figures



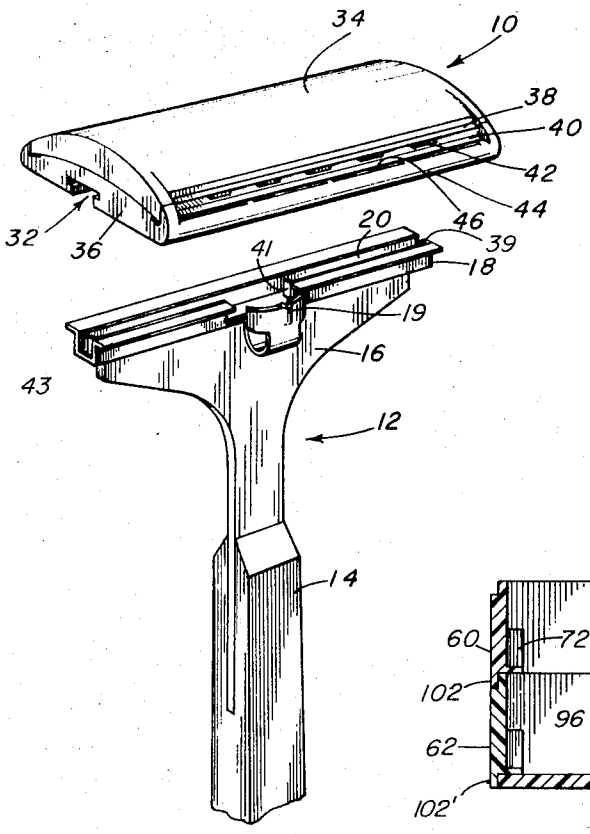


Fig. 1

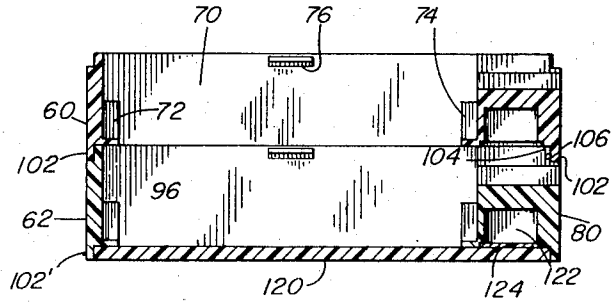


Fig. 4

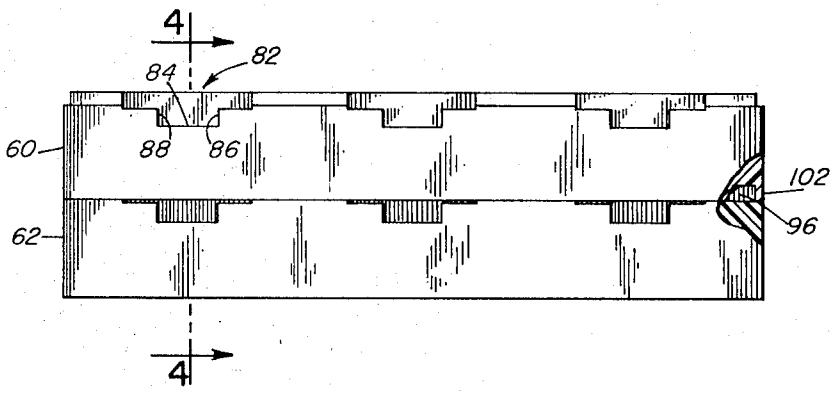


Fig. 3

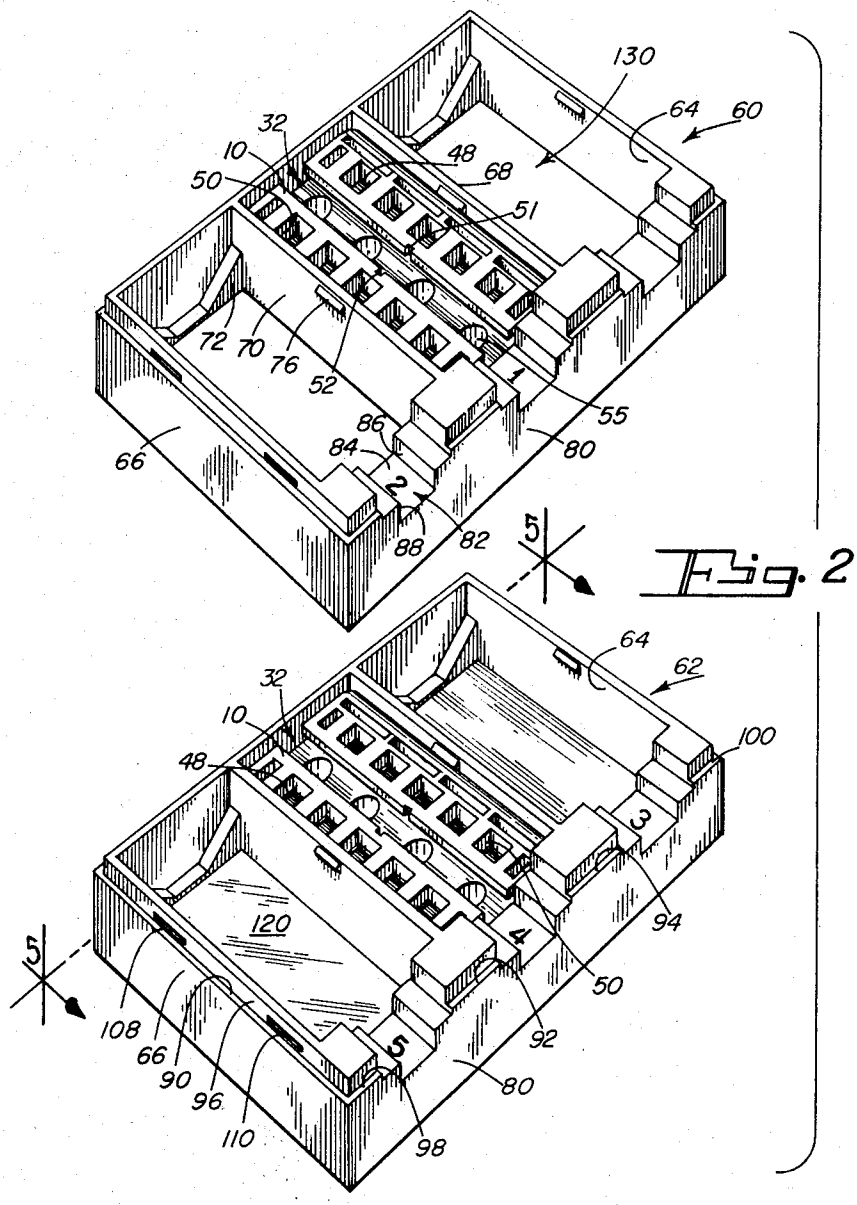

130
64
60
32
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72
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52
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84
80
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88
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64
62
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4
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92
90
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80
110
98

Fig. 2

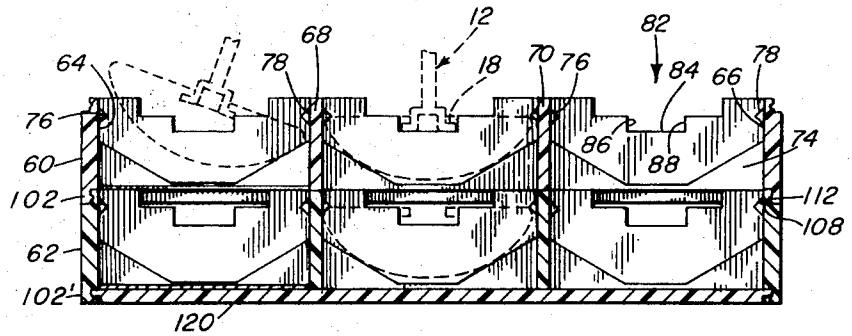

12
68
82
64
78
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70
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84
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78
76
86
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74
60
102
112
108
62
102'
120

Fig. 5

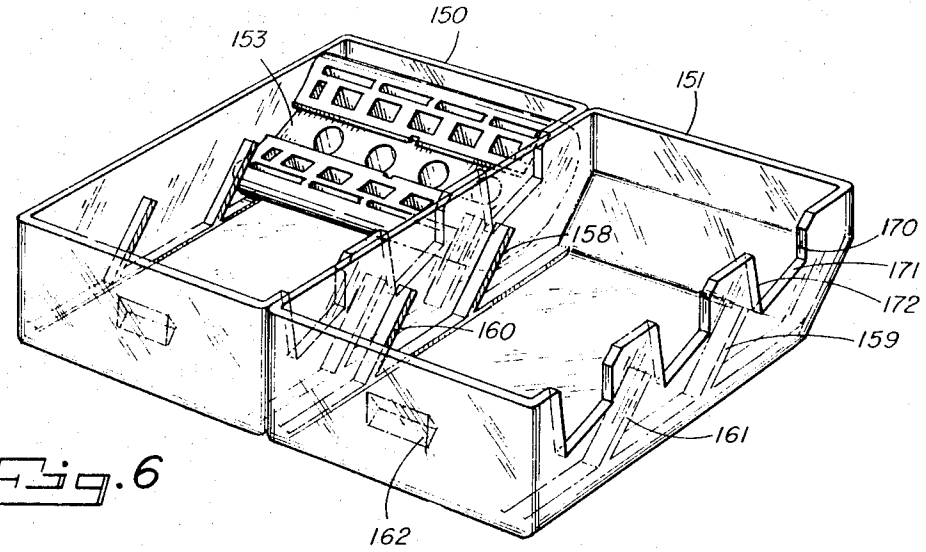


Fig. 6

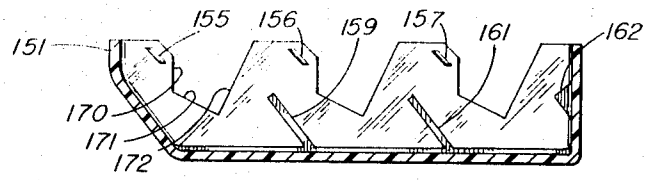


Fig. 7

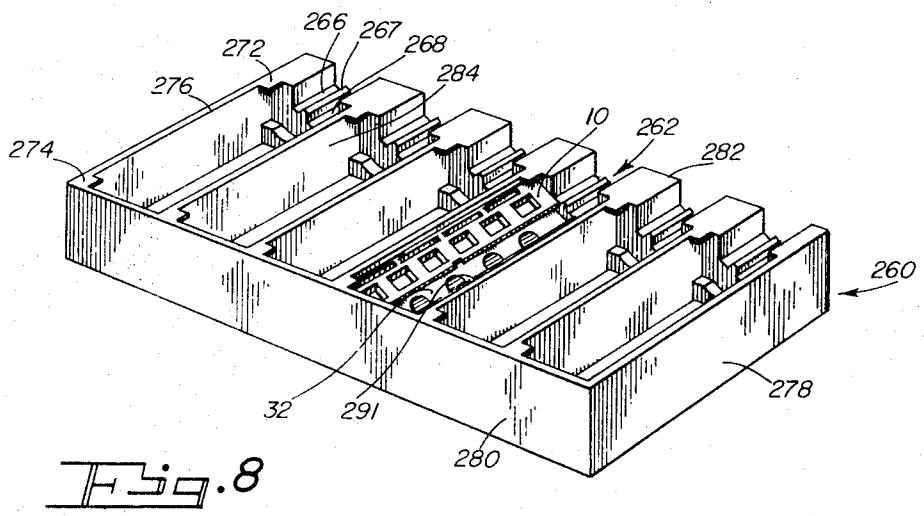


Fig. 8

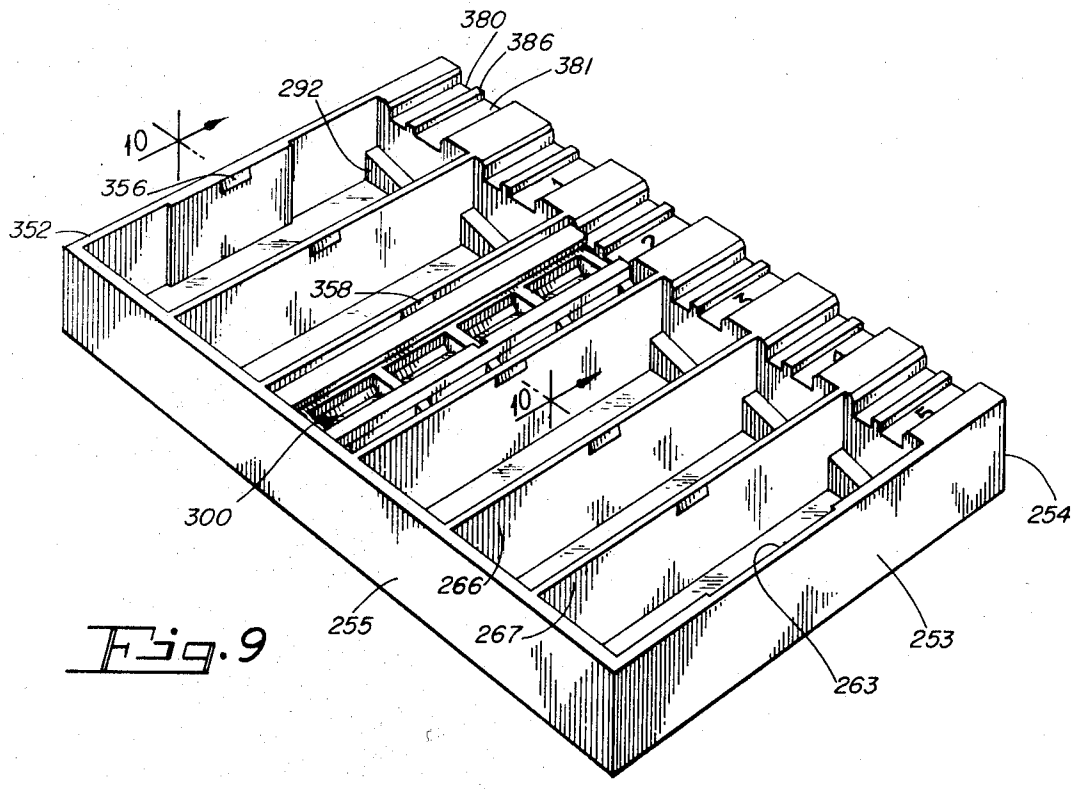

380
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381
292
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358
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300
254
266
255
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253
263

Fig. 9

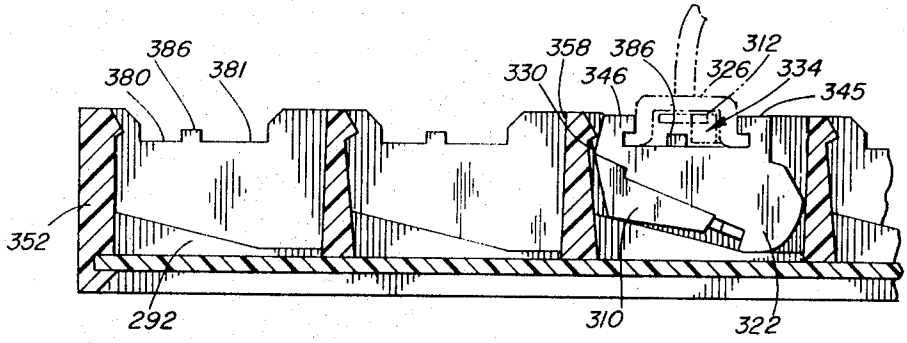

386
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381
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386
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330
346
326
334
345
352
292
310
322

Fig. 10

SYSTEM FOR DISPENSING RAZOR BLADE CARTRIDGES

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a division of U.S. Application Ser. No. 270,138, filed July 10, 1972, now U.S. Pat. No. 3,783,493; and Application Ser. No. 270,138 is a continuation-in-part of U.S. Application Ser. No. 191,665, filed Oct. 22, 1971, now U.S. Pat. No. 3,783,510, and of U.S. Application Ser. No. 236,723, filed Mar. 21, 1972, now U.S. Pat. No. 3,785,051, and of U.S. Application Ser. No. 258,682, filed June 1, 1972, now U.S. Pat. No. 3,771,223.

BACKGROUND OF THE INVENTION

The present invention relates to safety razors of a type having at least one blade permanently bonded in a disposable cartridge. More particularly, the present invention relates to a system for dispensing razor blade cartridges.

It is known to permanently bond a blade having a single edge in a disposable cartridge. For example, U.S. Pat. Nos. 2,654,148 and 3,388,831 each disclose a razor blade permanently bonded in a disposable cartridge. Typically, a safety razor has a guard surface situated downwardly and outwardly from the cutting edge of a blade and parallel to the cutting edge. The guard surface may be of the comb variety, such as in U.S. Pat. No. 2,654,148, or formed by the outer surface of an elongated guard bar, such as shown in U.S. Pat. No. 3,388,831. An advantage of providing a blade permanently bonded in a cartridge is that it is possible to optimize the shaving angle defined by the relationship between the cutting edge and the guard surface to minimize the possibility of nicks and cuts and to maximize shaving efficiency.

SUMMARY OF THE INVENTION

In accordance with an aspect of the present invention, there is provided a system for dispensing a plurality of razor blade cartridges each having slidably engageable surfaces formed transversely thereof. The system comprises a holder having a plurality of supporting surfaces formed transversely thereof for sliding engagement with the cartridge slidably engageable surfaces. The system also comprises at least one dispenser unit having a longitudinal row of transverse cartridge chambers, means in each one of the chambers for releasably maintaining a cartridge therein with the cartridge slidably engageable surfaces positioned for engagement by the holder supporting surfaces, and guide means formed in a side wall of the unit for guiding the holder supporting surfaces into and out of engagement with the cartridge slidably engageable surfaces. Initially, an end one of the chambers is empty, and the next successive chambers have unused cartridges therein. When an initial cartridge on the holder is no longer suitable for use, it is positioned in the empty chamber by means of the holder and brought into engagement by the maintaining means in the empty chamber. The supporting surfaces of the holder are then slid out of engagement with the slidably engageable surfaces of the initial cartridge and out through the guide means to one side of the empty chamber. Then. at least a portion of the holder supporting surfaces is positioned in the guide means to one side of the first successive chamber following the empty chamber, and the supporting surfaces are moved through the first successive chamber guide means into sliding engagement with the slidably engageable surfaces of the cartridge in the first successive chamber. By means of the holder, the maintaining means in the first successive chamber is overcome, and the cartridge from the first successive chamber is removed. Thereafter, each cartridge, when no longer suitable for use, is replaced in the chamber from which it was removed, and the cartridge from the next successive chamber is removed for use until all the cartridges are successively removed from the dispenser unit for use.

The invention also provides at least two dispensing units as described above, and means for releasably connecting one of the two dispensing units to the other to render the guide means of said one dispenser unit inaccessible to the supporting surfaces of the holder until said other unit is disconnected therefrom.

Thus, the system of the present invention provided for dispensement of unused cartridges and for storage of used cartridges without requiring that the cartridges be touched by hand. Further, the dispenser of the present invention can be constructed of relatively inexpensive material, and without moving parts. Still further, the system of the present invention provides a ready identification of the unused and used cartridges in the dispenser, and also a convenient indication of the next unused cartridge that should be removed for use.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is an exploded view of a cartridge and a cartridge holder suitable for use in embodiments of the present invention;

FIG. **2** is an exploded view of a cartridge dispenser embodiment of the present invention;

FIG. **3** is a side elevation view of the dispenser of FIG. **2** with a portion of a side wall broken away;

FIG. **4** is a cross-sectional view of the dispenser taken along Lines **4—4** of FIG. **3**;

FIG. **5** is a cross-sectional view of the dispenser taken along Lines **5—5** of FIG. **2**;

FIG. **6** is a perspective view of another dispenser embodiment;

FIG. **7** is a cross-sectional view taken along Lines **7—7** of FIG. **6**;

FIG. **8** is a perspective view of yet another dispenser embodiment;

FIG. **9** is a perspective view of still another dispenser embodiment; and

FIG. **10** is a partial cross-sectional view of FIG. **9** taken along Lines **10—10.**

DESCRIPTION OF SPECIFIC EMBODIMENTS

FIG. **1** shows an exploded view of a blade cartridge **10** and a cartridge holder **12.** The blade cartridge **10** has a pair of double edge blades **38, 40** bonded permanently between a cap **34** and a blade seat member **36.** The blades **38, 40** are maintained in a separated state by a spacer having a plurality of comb-like teeth **42** protruding a slight distance from beneath the cutting edge of the upper blade **38.** A guard bar **44** is spaced outwardly from each of opposite longitudinal sides of the blade seat member **36** to provide a plurality of downwardly extending shaving residue channels **46** beneath the cutting edge of the lower blade **40.** Shaving

residue channels are also provided between the cutting edges of the blades **38, 40** which are defined by the spaces between adjacent spacer teeth **42,** perforations **48** (FIG. **2**) in the lower blade **40,** and apertures **50** (FIG. **2**) in the underside of the blade seat member **36.**

The holder **12** includes a handle **14** to which a frame member **16** is secured. A generally U-shaped flanged channel member **18** and a stop and spring member **20** are secured to the upper portion of the frame member **16.** The cartridge **10** is removably secured to the holder **12** by sliding the flanged U-shaped member **18** into a T-shaped channel **32** formed transversely along the underside of the blade seat **36.** When the flanged U-shaped member **18** is centrally located in the T-shaped channel **32,** a biased detent **19** is in abutting engagement with one of two notches **51, 52** formed in the T-shaped channel **32.**

The cap **34,** the spacer **42** and the blade seat **36** can all be composed of moldable plastic material, and the spacer **42** can alternatively be composed of metal, such as aluminum. The cap **34** can be permanently bonded to the blade seat **36** by deforming the lower ends of a plurality of posts (not shown) extending downwardly from the underside of the cap **34.** The post deformations can be carried out within the bores **55** formed along the underside of the blade seat **36** by application of mechanical, heat or ultrasonic energy. Further, the cap **34** can be permanently bonded to the blade seat **36** by providing abutting surfaces in the cap **34** and in the blade seat **36** by applying ultrasonic energy to either the top of the cap **34** or the bottom of the blade seat **36** to bond the abutting surfaces together.

With reference to FIGS. **2 – 5,** the dispenser includes an upper multi-chamber cartridge container **60** and a lower multichamber container **62.** The containers **60, 62** can be suitably formed of moldable plastic. Further, the containers **60, 62** can have identical structure, and the dispenser may have more than two containers.

Each one of the containers **60, 62** has opposing end walls **64, 66** and a pair of transverse partitions **68, 70** to define three cartridge chambers. Each one of the chambers has a pair of spaced cartridge rests **72** (FIG. **2**), **74** (FIG. **5**) at opposite transverse sides thereof. The cartridges **10** are positioned within the chambers in an inverted position with the upper outer side ends of the cap **34** and the blade seat **36** in abutting engagement with the rests **72, 74** to prevent the cutting edges of the blades **38,40** from engaging or contacting the surfaces of the containers **60, 62.** As shown in FIG. **5,** stop members **76, 78** are formed on the inner surfaces of the end walls **64, 66** and on opposite sides of the partitions **68, 70.** The stop members **76, 78** are provided for snap-lock engagement with the underside portions of the guard bars **44** of the cartridges **10** to maintain the cartridges **10** in the chambers in an abutting engagement with the rests **72, 74.**

Each one of the containers **60, 62** has a side wall **80** having three guide channels **82** transversely formed in the top surface thereof. Each one of the guide channels **82** has a horizontal guide surface **84** formed between opposing vertical surfaces **86, 88.** The guide surface **84** is provided to guide the upper surfaces of the U-shaped flanged channel member **18** into or out of sliding engagement with the cartridge.

Each one of the containers **60, 62** has a horizontal stepped surface **90** defined by a vertical surface **96** spaced inwardly from the outermost vertical surfaces of the container. The stepped surface **90** extends around three sides of the container, and stepped surfaces **92, 94, 98, 100** are provided in the plane of the surface **90** on each side of the guide channels **82** formed in the side wall **80.**

The underside of each one of the containers **60, 62** has a downwardly extending skirt **102** defined by a horizontal surface **104** and a vertical surface **106** (FIG. **4**). The skirt **102** is dimensioned for a close fit with the stepped surfaces **90, 92, 94, 98, 100** and the vertical surface **96.** The upper vertical surface **96** has a pair of outwardly opened recesses **108, 110** formed in the opposite end walls **64, 66.** As more clearly shown in FIG. **5,** the recesses **108, 110** at each end of the lower container **62** receive protrusions **112** formed in the inner side of the skirt **102** of the upper container **60** to provide a snap-lock connection between the two containers **60, 62.**

As shown in FIG. **2,** the chambers of the upper container **60** are opened at the bottom sides thereof. The lower container **62** may have a clear and/or decorative bottom wall **120** in snap-lock engagement with the skirt **102'** of the lower container **62.** As shown in FIG. **4,** the side wall **80** of each of the containers **60, 62** has a cavity **122** along the underside thereof. A decorative and/or descriptive strip of metal or other material **124** can be positioned along the lower end of the cavity **122** for view through the lower wall **120.**

With reference to FIG. **2,** the dispenser is manufactured and assembled with the top chamber **130** of the upper container **60** vacant, and with the remaining two chambers of the upper container **60** and the three chambers of the lower container **62** having cartridges **10** therein. The chambers having cartridges therein are consecutively numbered from **1** through **5** in the channel guide surfaces **84.** A new holder **12** may have a dummy cartridge (not shown) having the same general outer configuration as that of the cartridge **10.** The dummy cartridge (not shown) or a used cartridge from a prior dispenser is inserted in the top chamber **130** by initially inserting a guard bar portion in the chamber **130** and rotating the holder **12** in a counter-clockwise manner as viewed in FIG. **5** in dashed lines until the lower surfaces of the two guard bars are snap-lock fitted beneath the stop members **76, 78.** The holder **12** is then slid to the right with the holder flanged channel member **18** passing outwardly along the guide surface of the chamber **130.**

A new cartridge is then removed by positioning the upper surfaces of the left portion of the flanged channel member **18** on the guide surface denoted with the numeral **1.** The holder **12** is then moved to the left for sliding engagement with the T-shaped channel **32** in the lower part of the cartridge **10.** The new cartridge is removed from the chamber by rotating the holder **12** clockwise as shown by the dashed lines in FIG. **5,** and the holder can then be lifted upwardly for use.

When the cartridge removed from chamber **1** is no longer suitable for use, it is returned to chamber **1** in the same manner as described hereinabove for positioning the dummy cartridge (not shown) or a used cartridge in the top chamber **130.** The cartridge from chamber **2** is then removed and used. After the cartridge removed from chamber **2** is no longer suitable for use, it is returned to chamber **2.** The upper container **60** is then disconnected from the lower container

62 and discarded. The holder 12 is then positioned on the guide surface denoted by numeral 3 and moved to the left to remove a new cartridge from the upper chamber of the lower container 62. The process of returning used cartridges to the chambers from which they were removed and using the cartridge in the next consecutive chamber is continued until the cartridge in chamber 5 is removed. At this time, the lower container 62 may be discarded and a new dispenser corresponding to that described with reference to FIG. 2 is obtained. Thereafter, the foregoing steps are repeated with the cartridge removed from chamber 5 of the discarded lower portion 62 being initially positioned in the top chamber 130 of the new dispenser. Alternatively, the cartridge removed from chamber 5 may be returned to chamber 5 prior to discarding the lower container 62.

FIGS. 6 and 7 show another dispenser embodiment wherein two dispenser units or containers 150, 151 are releasably connected together, for example, by a suitable adhesive or by ultrasonic spot-welding. Each one of the dispenser units 150, 151 has a longitudinal row of three transverse cartridge chambers defined by the end walls thereof and two pairs of rigid webs 158, 159; 160, 161. As shown in FIG. 7, each chamber has a stop member 155 – 157 extending inwardly thereof for releasably engaging the underside of a cartridge guard bar to releasably maintain a cartridge therein. Cartridges are fitted in the upper chambers of each of the dispenser units 150, 151 by positioning the lower undersurface of the cartridge against the underside of the sloping webs 158, 159 and resting the top upper surface of the cartridge on the upper walls of the dispenser units 150, 151 with the stop 155 positioned above the underside of the upper guard bar as shown in FIG. 6. Cartridges are positioned in the middle chambers of each of the dispenser units 150, 151 by positioning the lower undersurface of the cartridge against the underside of the sloping pair of webs 160, 161 with the top upper surface of the cartridge resting on the upper sides of the sloping web members 158, 159 and the stop 156 engaging the underside of the top guard bar. Similarly, a cartridge is positioned in the lower chambers of each of the dispenser units 150, 151 with the upper surface of the cartridge resting on the upper sides of the web members 160, 161 and with the underside of the bottom guard bar in abutting engagement with a stop member 162 protruding from the bottom wall of the dispenser. Further, the stop 157 engages the underside of the upper end of the cartridge to releasably maintain the cartridge in the lower chambers of the dispenser units 150, 151.

Each chamber of the dispenser units 150, 151 has guide means formed in one side wall thereof consisting of upwardly extending surface 170, 172 interconnected by a sloping surface 171. The surfaces 170 – 172 are provided to guide the U-shaped flanged member 18 of the holder 12 into and out of engagement with the T-shaped channel 153 formed transversely along the underside of the cartridge.

The dispenser of FIG. 6 is typically provided with the three chambers of the left dispenser unit 150 having cartridges therein. The right dispenser unit 151 can be provided with cartridges in the upper two chambers and with the bottom chamber being empty. An initial cartridge on the holder 12 can either be a dummy cartridge or a used cartridge from a prior dispenser. The initial cartridge, when no longer suitable for use, is positioned in the empty chamber of the right dispenser unit 151 by rotating the holder in a counterclockwise direction as viewed in FIG. 7 until the stop 157 is in engagement with the underside of the cartridge. The holder 12 is then slid to the right through the guide surfaces of the empty chamber. The holder is then positioned in the guide surfaces of the middle chamber of the dispenser unit 151 and moved into sliding engagement with the T-shaped channel of the cartridge therein. The holder is then rotated in a clockwise direction as viewed in FIG. 7 to overcome the stop 156 for removal of the cartridge from the middle chamber. When the cartridge from the middle chamber is no longer suitable for use, it is returned to the middle chamber and the cartridge in the upper chamber of the dispenser 151 is then removed for use in the same manner as described with the center chamber. When no longer suitable for use, the cartridge from the upper chamber is returned thereto, and the dispenser unit 151 is disconnected from the dispenser unit 150 by overcoming the connecting means which, as noted above, may consist of an adhesive or an ultrasonic weld. The dispenser unit 151 can then be discarded, and the cartridges in the dispenser unit 150 can be successively removed for use and returned to their respective chambers as described hereinabove with reference to the dispenser unit 151.

Another dispenser embodiment is shown in FIG. 8. With reference to FIG. 8, a dispenser 260 has a pair of opposing side walls 280, 282, and a pair of opposing end walls 276, 278. Cartridge chambers are formed within the dispenser 260 by transverse partitions 284. Stop members 272, 274 are formed on the top portion of each of the end wall 276 end of the partitions 284 for engaging the underside portion of the guard bar of the cartridge 10 to maintain the cartridge 10 in each chamber in abutting engagement with rests formed at the lower part of each chamber along the side walls thereof. Each of the channels 262 has an upwardly extending transverse guide stop 267 formed between guide surfaces 266, 268. The upper guide surface 266 is narrower than the lower guide surface 268 such that a plurality of stop tabs 39 (FIG. 1) on the transverse surface of the holder 12 can pass over the lower guide surface 268 without hitting or abutting the guide stop 267. However, the stop tabs 39 cannot pass over the upper guide surface 266 without abutting the guide stop 267. Thus, the combination of the guide stops 267 and of the holder stop tabs 39 prevents inserting a cartridge in an inverted position of the holder 12, particularly when the cartridge 10 has cutting edges on one side thereof and when the holder is curved, such as shown in FIG. 10.

The dispenser 260 initially has a cartridge in each one of the lower five chambers, and the guide channels 262 for each one of the lower five chambers can be numbered from 1 to 5. A holder having an initial cartridge which may consist of a dummy cartridge having the same general outer configuration as that of the cartridge 10, or a cartridge from a prior dispenser, is used to insert the initial cartridge in the top empty chamber by inserting one guard bar portion in the chamber and rotating the holder 12 in a counterclockwise manner as viewed in FIG. 8. The holder 12 can then be slid to the right with the holder channel member 18 (FIG. 1) pass-

ing outwardly through the guide channel of the upper chamber.

A new cartridge is then removed by positioning a portion of the U-shaped channel member **18** in the guide channel of the chamber adjacent to the upper channel with the tabs **39** of the holder **12** oriented to pass over the lower guide surface as described hereinabove. The holder is then moved to the left for sliding engagement with the T-shaped channel **32** in the lower part of the cartridge **10.** The new cartridge is then removed from the chamber by rotating the holder **12** clockwise as viewed in FIG. **8.** Thereafter, each used cartridge is placed in the chamber from which it was removed, and a new cartridge from the next adjacent chamber is removed for use until all of the cartridges are removed from the dispenser **260** for use.

FIGS. **9** and **10** show still another dispenser embodiment. With reference to FIGS. **9** and **10,** the dispenser has a pair of opposing end walls **253, 352,** and a pair of opposing side walls **254, 255.** Cartridge chambers are formed within the dispenser **250** by transverse partitions **266.** Each one of the chambers has a pair of wedge-shaped rest members **292** formed along the inner surfaces of the side walls **254, 255** and extending from the upper wall or partition **352, 266** in a downward extending fashion in the direction of the bottom of the dispenser. The wedge-shaped members along the inner surface of the side wall **255** cannot be seen. A stop **356** is formed on the top portion of each one of the end wall **356** and partitions **266.** The side walls **254** has a plurality of channels formed transversely in the top surface thereof. Each one of the channels has an upwardly extending transverse guide stop **386** formed between guide surfaces **380, 381.** The upper guide surface **380** is narrower than the lower guide surface **381** such that the stop tabs **39** (FIG. **1**) of the holder **12** can pass over the lower guide surface **381** without hitting or abutting the guide stop **386.** However, the stop tabs **39** cannot pass over the upper guide surface **380** without abutting the guide stop **386.** Thus, the guide channels prevent inserting a cartridge in an inverted position on the holder, particularly when the cartridge has cutting edges formed at only one side thereof.

As described with reference to FIG. **8,** the dispenser of FIGS. **9** and **10** can initially have a cartridge in each one of the chambers identified by one of numerals **1** – **5** shown in the guide channels. The top or upper chamber is initially empty. The holder **12** having an initial cartridge which may be a dummy or a used cartridge from a prior dispenser is used to insert the initial cartridge in the upper empty chamber by inserting the guard bar portion **322** in the chamber and rotating the holder in a counter-clockwise manner as viewed in FIG. **10** until a boss **330** snaps under the stop **356.** In this position, a cap member **310** and the guard bar rests on a pair of wedge-shaped support members **292.** The holder can then be slid to the right with the U-shaped channel member **18** passing outwardly through the channel in the side wall. As described with reference to FIG. **8,** the unused cartridges are successively removed from the dispenser for use in the order indicated by the numerals in the channels. After each cartridge is no longer suitable for use, it is returned to the chamber from which it was removed, and an unused cartridge is removed from the next adjacent chamber.

As used herein, "transverse" is the side-to-side direction as defined by the elongated direction of the T-shaped cartridge channels **32; 300** and the U-shaped holder member **18.** Further, "transverse," when used herein with respect to the dispensers, is a direction perpendicular to the side walls having the guide channels **82; 170–172; 262; 380, 381, 386.** Thus, "longitudinal" as used herein with reference to the dispenser, is a direction parallel to the side walls having the guide channels.

What is claimed is:

1. A system for dispensing razor blade cartridges comprising:

a plurality of razor blade cartridges, each one of said cartridges including slidably engageable surfaces formed transversely thereof;

a holder having a plurality of supporting surfaces formed transversely thereof for selective sliding engagement with the slidably engageable surfaces of said plurality of cartridges;

2. The system of claim **1** wherein each one of said dispenser units further comprises another side wall opposing said side wall having said guide means therein, and a plurality of transverse parallel walls including a pair of opposing end walls interconnecting said side walls to provide said plurality of chambers, and wherein said connecting means comprises a first plurality of surfaces extending upwardly from said side walls and said end walls of said second dispenser unit for releasably engaging a second plurality of surfaces extending downwardly from said side walls and said end walls of said first dispenser unit.

3. The system of claim **2** further comprising means for releasably locking said first and said second plurality of surfaces.

4. The system of claim **2** wherein said guide means of said second dispenser unit are formed between the first surfaces extending upwardly from the guide means side wall.

* * * * *

UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,854,201 Dated December 17, 1974

Inventor(s) JAN DAWIDOWICZ AND FRANK A. FERRARO

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 4, after line 32 insert:

--first and second dispenser units, each one of said dispenser units comprising a longitudinal row of transverse cartridge chambers, means in each one of the chambers for releasably maintaining a razor blade cartridge therein with the slidably engageable surfaces of the cartridge positioned for engagement by said supporting surfaces of said holder, and guide means formed in a side wall of the dispenser unit to one side of each of said chambers for transversely guiding said supporting surfaces of said holder into or out of engagement with the cartridge slidably engageable surfaces;

said plurality of cartridges being releasably maintained in successive chambers of each one of said first and second dispenser units; and

means for releasably connecting said second dispenser unit to said first dispenser unit to render the guide means of said second dispenser unit inaccessible to said supporting surfaces of said holder until the cartridges in said first dispenser unit are sequentially removed from and returned to the respective chambers of said first dispenser unit by means of said holder, thereafter said second dispenser unit being disconnected from said first dispenser unit and the cartridges in said second dispenser being sequentially removed from and returned to the chambers of said second dispenser unit by means of said holder. --

Signed and sealed this 22nd day of April 1975.

(SEAL)
Attest:

RUTH C. MASON
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents
and Trademarks

FORM PO-1050 (10-69)

USCOMM-DC 60376-P69
* U.S. GOVERNMENT PRINTING OFFICE : 1969 O—366-334