Sept. 30, 1952 G. G. SIMMONDS 2,612,401

HANDLE FOR CARTONS OR THE LIKE

Filed April 6, 1949 2 SHEETS—SHEET 1

Fig. 1.

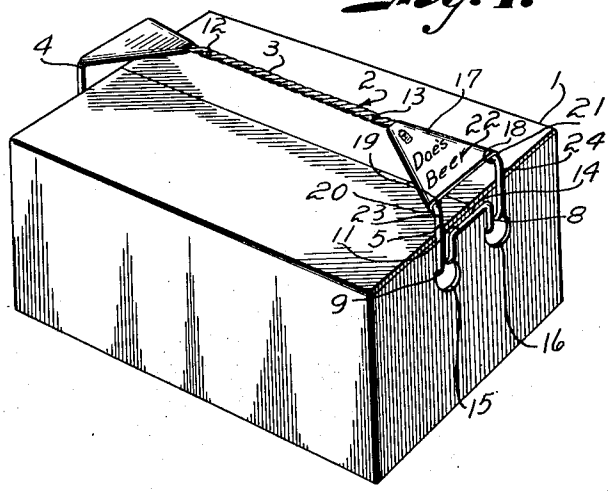


Fig. 4.

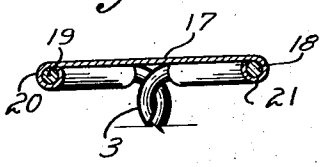


Fig. 3.

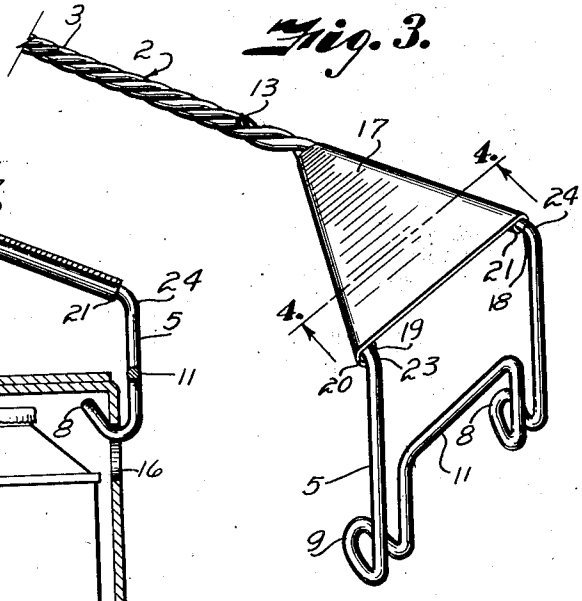
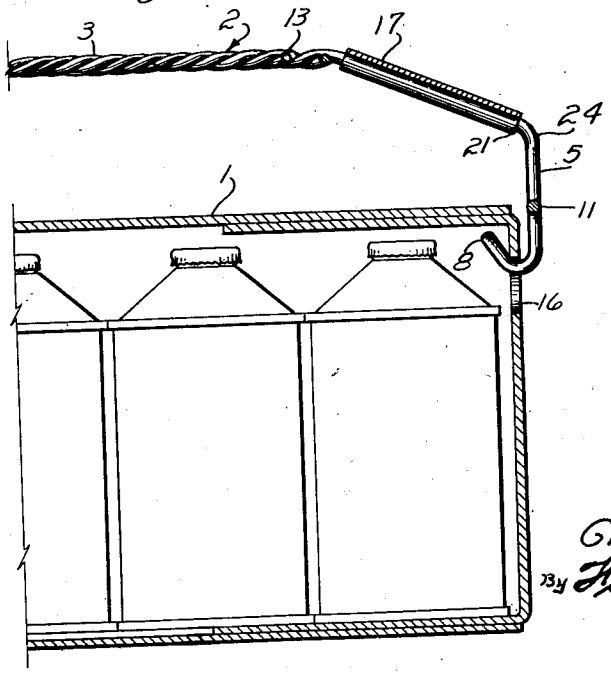


Fig. 2.



Inventor

Glen G. Simmonds

By Fishburn & Mullendore

Attorneys

Sept. 30, 1952 G. G. SIMMONDS 2,612,401

HANDLE FOR CARTONS OR THE LIKE

Filed April 6, 1949 2 SHEETS--SHEET 2

Fig. 5.

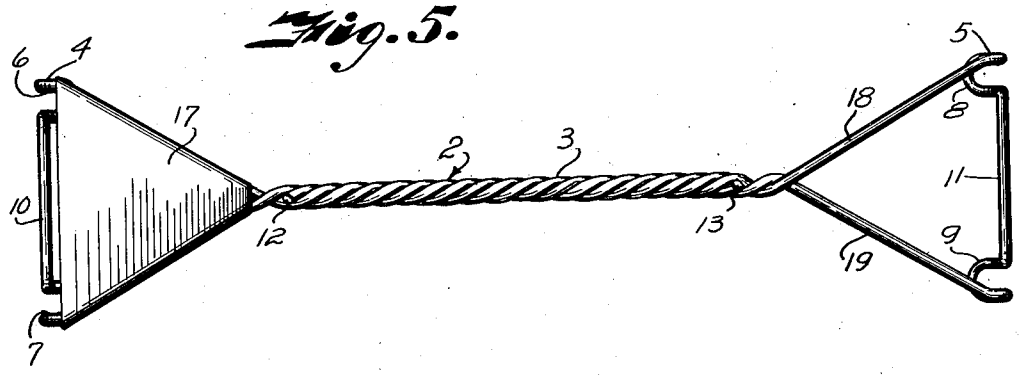


Fig. 6.

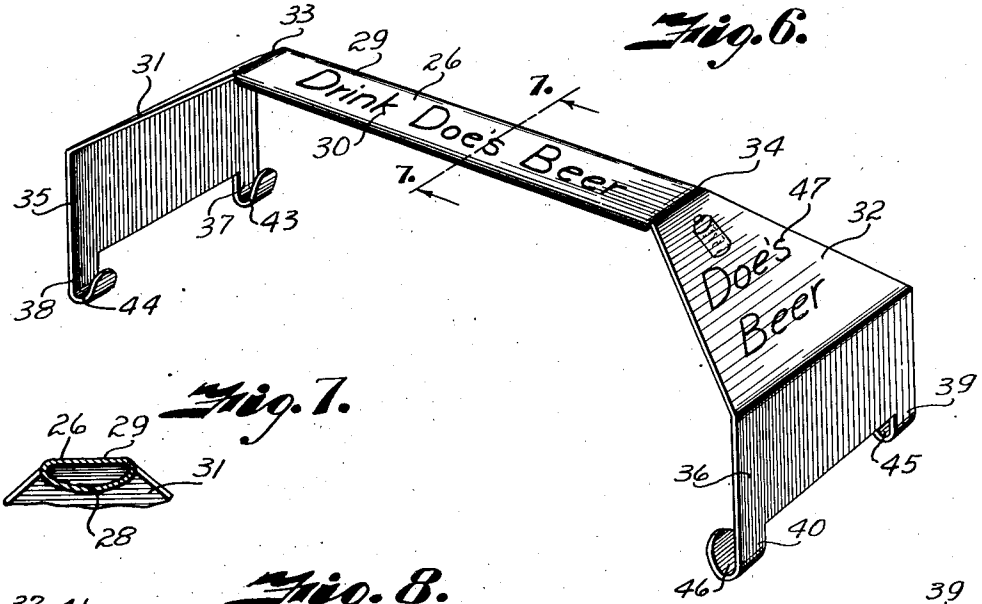
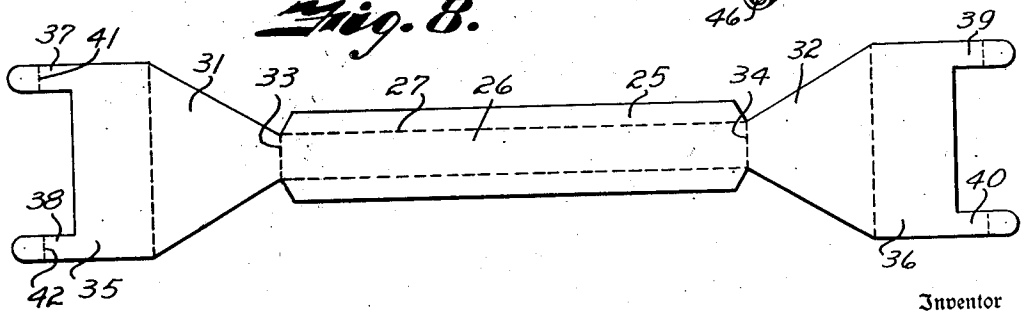


Fig. 7.

Fig. 8.



Inventor

Glen G. Simmonds

By Fishburn & Mullendore

Attorneys

Patented Sept. 30, 1952 2,612,401

UNITED STATES PATENT OFFICE

2,612,401

HANDLE FOR CARTONS OR THE LIKE

Glen G. Simmonds, Kansas City, Mo.

Application April 6, 1949, Serial No. 85,841

1 Claim. (Cl. 294—27)

1

This invention relates to handles for transporting cartons or the like, and more particularly to a device for transporting cartons containing soft drinks and in which the cartons are provided with openings in the respective ends for reception of the handle therein.

Cartons of this character are usually provided in their ends or sides with handholds for carrying the cartons from place to place. The objection to this form of carton is that if the contents of the carton be heavy the edges of the hand hold are injurious to the hands of the user.

It is therefore the principal object of the present invention to provide a handle for cartons or the like having openings in the respective ends thereof in which the handle will be engaged for transporting of the carton; to provide a device of this character having a hand portion and end portion provided with hooks engaging in the openings of the carton; to provide a device of this character in which upward pressure on the handle will cause the end members to engage the ends of the carton and prevent accidental removal of the hooks from the openings; and to provide a device of this character of light weight which may be quickly and easily applied to the carton and disengaged therefrom.

In accomplishing these and other objects of the present invention, I have provided improved details of structure, the preferred forms of which are illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a carton showing my present handle attached thereto ready for use.

Fig. 2 is a fragmentary vertical sectional view through the carton and handle showing the hook member applied in the opening of the carton.

Fig. 3 is an elevational view of one end of the handle member particularly illustrating the formation of the hook member and the bars between the hooks engaging the side of the end of the carton.

Fig. 4 is a cross sectional view through the handle taken on a line 4—4, Fig. 3.

Fig. 5 is a top plan view of the device with one of the triangular shaped bracing members removed therefrom.

Fig. 6 is a perspective view of a modified form of my invention.

Fig. 7 is a cross sectional view taken on a line 7—7, Fig. 6.

Fig. 8 is a top plan view of the sheet of material before it is formed to make the device shown in Fig. 6.

2

Referring more in detail to the drawings:

1 designates a carton or container for soft drinks or other articles, and 2 designates a handle embodying the features of my invention. In this form of the invention, the handle proper is formed from a single strand of material such as wire or the like and is so bent to form a handle 3 and ends 4 and 5. The ends are provided with hooks 6—7 and 8—9 having cross bars 10 and 11 connecting the hook members.

In forming the handle member from a single piece of wire the strand is doubled upon itself and the ends 12 and 13 pass each other a substantial distance or the length of the handle. The strands are then twisted at their middle to form the handle, the overlapping of the ends 12 and 13 forming a triple thickness of the wire at this point.

In order to form the hooks on the ends 4 and 5 of the handle the wire is bent inwardly and upwardly and the cross bars 10 and 11 are so formed to extend upwardly a substantial distance above the hook so as to engage the side of the end of the slots as best illustrated at 14 (Fig. 1) when the hooks are engaged in the openings 15 and 16 of the respective ends of the box, also as illustrated in Fig. 1.

If desired triangular sheets of material such as metal may be provided as indicated at 17 to engage the respective outwardly inclined portions 18 and 19 emanating from the handle portion of the device. The sides of the triangular shaped member are substantially coextensive with the inclined portions 18 and 19 and are formed with hooks or channels on their respective sides as indicated at 20 and 21 to engage the wires 18 and 19 (Fig. 3) to lend rigidity to the ends of the handle members and also provide advertising space if desired as indicated at 22 (Fig. 1). The portions 18 and 19 emanating from the handle portion of the device may be inclined slightly downwardly from the handle and then vertically downwardly as indicated at 23 and 24 forming shanks on the end portions also to engage against the sides of the box to form a rigid structure.

In use of the invention thus described, the handle is grasped by the handle portion 3 and the hook members on one end engage in the openings 15 and 16. There will be an inward tension on the end members, and it will thus require slight tension outwardly to engage the opposite hooks in the openings on the opposite ends of the carton. This slight tension will also retain the hooks in the openings when the car-

ton is not being transported, and the cross bar 11 of the rectangular end members will engage against the end of the carton when the carton is transported.

In the form of the invention shown in Figs. 6, 7 and 8, the handle may be stamped or cut from a single sheet of material 25 such as metal, aluminum, plastic or the like, comprising an elongated body forming the handle 26 by folding the same on the fold line 27 and turning the same downwardly and inwardly until the respective ends engage each other as indicated at 28 (Fig. 7) to form a substantially rounded portion on the bottom of the handle to prevent injury to the hands and a substantially plane surface 29 for advertising as indicated at 30 (Fig. 6). Extending outwardly from the handle 26 are substantially triangular-shaped portions 31 and 32 bent downwardly slightly as indicated at 33 and 34 forming end portions 35 and 36 extending substantially vertically downwardly from the slightly inclined portions. The end portions 35 and 36 are provided with extensions 37—38 and 39—40, respectively, adapted to be folded as indicated by the dotted lines 41 and 42 to form hooks 43—44 and 45—46 on the respective ends of the device, the hooks being turned inwardly from the end portions 35 and 36 to engage in the openings of cartons or the like as in the form of the invention shown in Figs. 1 to 5 inclusive.

With this form of the invention the substantially triangular-shaped members emanating from the handle portion are also provided with advertising matter as indicated at 47 (Fig. 6).

The ends of the handle member in this form of the invention are also tensioned slightly inwardly and the hooks on one end may be inserted in the openings in the carton and then slight tension outwardly on the opposite ends will engage the hooks in the openings on the opposite ends of the cartons and retain the same therein. The inside of the substantially plane end portions 35 and 36 on the handle will engage against the sides of the ends of the carton to make a rigid structure for transporting the carton.

It will be obvious from the foregoing that I have provided an improved handle for carrying cartons or the like which is simple, economical to manufacture and efficient in operation.

I claim:

A detachable handle for cartons having laterally spaced openings in the ends thereof comprising, an elongated body member forming a hand hold, said body member being two wire portions twisted one around the other, end members on the ends of the body member, said end members being wire loops having downwardly inclined diverging portions terminating in depending laterally spaced substantially parallel portions having inturned lower ends forming hooks adapted to engage in the spaced openings in the ends of the carton, said inturned ends being connected by inverted U-shaped cross bars in the planes of the depending laterally spaced portions for engaging the ends of the carton, and brace members of sheet material substantially coextensive with and extending between the diverging portions and having edges turned therearound for retaining said diverging portions against relative lateral and bending movement.

GLEN G. SIMMONDS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,687,552	Fassbender	Oct. 16, 1928
1,939,227	Robert	Dec. 12, 1933
2,023,328	Lamp	Dec. 3, 1935
2,128,723	Zettler	Aug. 30, 1938
2,152,933	Talbot	Apr. 4, 1939
2,198,244	Chapman	Apr. 23, 1940
2,453,286	Von Clemm	Nov. 9, 1948

FOREIGN PATENTS

Number	Country	Date
371,015	Great Britain	Apr. 11, 1932