July 23, 1968 J. P. CANNON ET AL 3,393,846

AUTOMOBILE JUG

Filed May 3, 1967

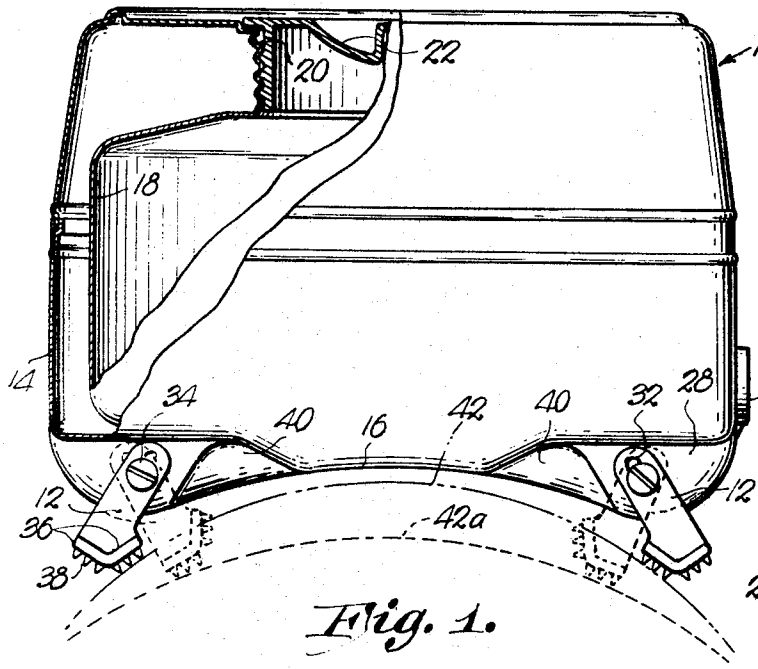


Fig. 1.

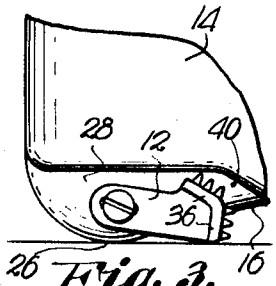


Fig. 3.

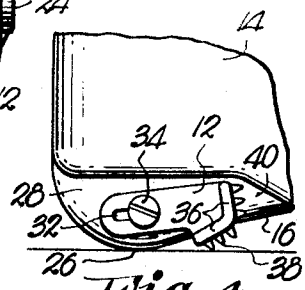


Fig. 4.

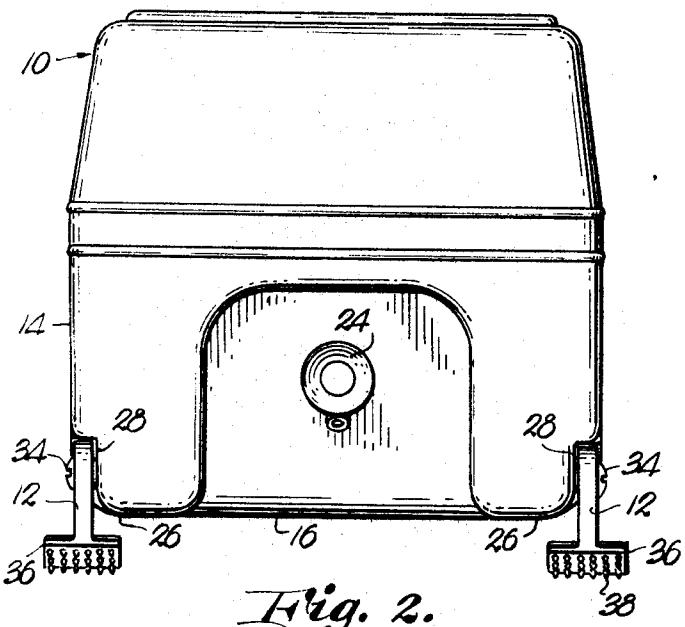


Fig. 2.

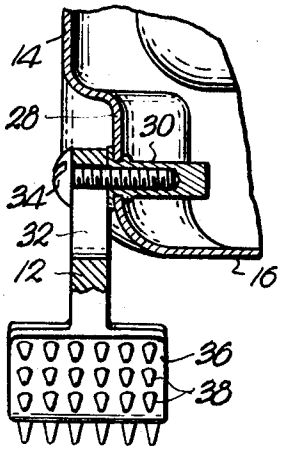


Fig. 5.

INVENTORS
John P. Cannon
Roy C. Degenfelder

BY Schmidt, Johnson, Hovey
Williams & Bradley
ATTORNEYS

United States Patent Office 3,393,846
Patented July 23, 1968

3,393,846

AUTOMOBILE JUG

John P. Cannon, Shawnee Mission, Kans., and Roy C. Degenfelder, Independence, Mo., assignors to Plattner Industries, Inc., North Kansas City, Mo., a corporation of Missouri

Filed May 3, 1967, Ser. No. 635,778
5 Claims. (Cl. 224—42.42)

ABSTRACT OF THE DISCLOSURE

A portable beverage container for use in motor vehicles has a concave bottom and is provided with four legs which are shiftable between extended and retracted positions. Each leg has a pair of feet facing in diverging directions, each foot being provided with a number of projections that engage and grip a drive shaft hump when the container is placed thereon. The dual foot arrangement in conjunction with the various possible extended positions of the legs adapt the container for support by humps of varying contour and size.

During long road trips, the traveler may desire to carry a portable beverage container in the passenger compartment of the vehicle to avoid frequent stops for refreshment. The usual thermos jug or similar container, however, is inconvenient to handle and locate within the compartment since, if placed on the floorboard, the jug may interfere with the feet of the occupants of the vehicle. Alternatively, if the jug is carried in one of the seats, it necessarily also interferes with passenger comfort as well as subjecting the seat to the water or other beverage which may drip or spill as it is drawn from the jug.

It is, therefore, the primary object of this invention to provide a beverage container for motor vehicles that may be stably supported by the drive shaft hump on the floorboard in order to preclude interference of the container with the comfort of the vehicle occupants.

As a corollary to the foregoing object, it is an important aim of the instant invention to provide such a container that will remain in place on the hump when subjected to the movements of the vehicle experienced under normal driving conditions.

Another important object is to provide a container as aforesaid having retractable legs which, when extended, serve to grip the surface of the hump to preclude displacement of the container and, when retracted, permit use of the container without interference from the legs.

Still another object of the invention is to provide legs for the container as aforesaid which are selectively positionable in accordance with the contour of the drive shaft hump so as to accommodate humps of various sizes and contours.

Yet another object of the invention is to provide each of the aforesaid container supporting legs with hump-gripping feet facing in diverging directions, in order to increase the range of hump sizes and contours that may be accommodated by the legs.

In the drawing:

FIGURE 1 is a side elevational view of the container looking longitudinally of the drive shaft hump (shown in phantom lines), a portion of the container being broken away to reveal details of construction;

FIG. 2 is a front elevational view of the container;

FIG. 3 is a fragmentary view showing one of the legs retracted;

FIG. 4 is a fragmentary view showing a retracted leg reversed in orientation with respect to the previously illustrated legs; and

FIG. 5 is an enlarged, fragmentary, sectional view through one of the corners of the container formed by the bottom and the sidewall thereof, looking substantially in the same direction as in FIG. 2.

The container comprises a vessel **10** provided with legs **12**, the latter being secured to the sidewall **14** of vessel **10** adjacent the concave bottom **16** thereof. Vessel **10** is of double-wall construction to provide an air space between sidewall **14** and an inner wall **18**. The space may be filled with an insulating material if desired. Vessel **10** is filled through an inlet **20** by removing a cap **22**. The beverage is drawn from vessel **10** through a valved outlet in the form of a spigot **24**.

Bottom **16** is of generally rectangular configuration and presents four corners **26** which are rounded and merge with the lower periphery of sidewall **14**. The sidewall **14** is recessed at **28** adjacent each corner **26** and is fitted with a tapped rivet **30** (FIG. 5). Each leg **12** has a longitudinal slot **32** therein at its normally uppermost end, a screw **34** being received by slot **32** and threaded into rivet **30**.

The normally lowermost end of each leg **12** is provided with a pair of angularly disposed feet **36**, each provided with a plurality of generally cone-shaped projections **38**. Bottom **16** has a well **40** formed therein adjacent each leg **12** for receiving the feet **36** thereof upon movement of the leg from the extended position shown in FIGS. 1, 2 and 5, to the retracted position illustrated in FIG. 3. With all four of the legs **12** retracted, the container may be placed on a flat surface such as a table without scarring the latter, since only the two straight side margins of bottom **16** will be in contact with the surface. The feet **36**, therefore, are effectively housed within wells **40** and the cavity formed by the concave bottom **16**.

The concavity of bottom **16** is also useful in providing a low profile for the container when mounted on a drive shaft hump **42** illustrated in phantom lines in FIG. 1. The broken line illustrations of legs **12** illustrate the mounting of the container on a drive shaft hump **42***a* having a broader contour or greater radius than hump **42**. The phantom illustrations of humps **42** and **42***a* represent the upper surfaces of such humps and show the transverse, convex contour of each hump. In FIGURE 1 the viewer looks in the longitudinal direction of humps **42** and **42***a* or generally axially of the drive shaft (not shown) fore or aft of the vehicle.

In use, screws **34** are loosened to permit adjustment of the extended positions of legs **12**, the loosened screws **34** permitting swinging movement of the legs about screws **34** and longitudinal shifting thereof within the limits of slots **32**. Thus, each leg may be independently set in any one of a number of extended positions depending upon the contour of the particular hump upon which the container is to rest. The projections **38** on feet **36** firmly grip the surface of the hump, such surface normally being presented by a rug or mat overlying the floorboard and drive shaft housing. As illustrated in FIG. 1, the angular disposition of the two feet **36** on each leg **12** permits the legs to be positioned with either the inside or the outside feet **36** thereof in gripping engagement with the hump, again depending upon the particular surface contour.

The reversed orientation of the leg **12** shown in FIG. 4 further illustrates the versatility of the leg arrangement. Note that the hump-gripping projections **38** on the downwardly facing foot **36** would now engage the surface of a hump having a contour approximately complementary to the concavity formed by bottom **16**. However, the container could still be placed on a flat surface without scarring or scratching the latter. To facilitate movement of legs **12** to the various possible positions thereof, the

kerf-headed screws may be replaced by wing bolts if desired.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. For use with a motor vehicle having a transversely convex drive shaft hump extending fore and aft of the vehicle, a liquid container comprising:

a vessel having an inlet provided with a cap, a valved outlet, and a bottom;

a pair of spaced legs adjacent said bottom secured to said vessel and having gripper means thereon engageable with said hump, whereby the container may be placed on the hump, straddling the latter, and thereby supported by the hump with said outlet accessible to occupants of the vehicle;

and means mounting each of said legs for movement between a retracted position and an extended, hump-engaging position depending from said vessel;

said bottom having a well therein for each leg respectively for receiving the latter when the leg is in the retracted position thereof.

2. For use with a motor vehicle having a transversely convex drive shaft hump extending fore and aft of the vehicle, a liquid container comprising:

a vessel having an inlet provided with a cap, a valved outlet, and a bottom;

a pair of spaced legs adjacent said bottom secured to said vessel and having gripper means thereon engageable with said hump, whereby the container may be placed on the hump, straddling the latter, and thereby supported by the hump with said outlet accessible to occupants of the vehicle;

and means mounting each of said legs for movement between a retracted position and any one of a number of extended, hump-engaging positions depending from said vessel, and including structure engaging each leg respectively for releasably maintaining the latter in a selected position independently of the other leg,

each of said legs having a pair of feet provided with said gripper means and facing outwardly in diverging directions when the leg is extended, whereby to accommodate a wide range of hump sizes.

3. The invention of claim 2,

each of said legs having a pair of opposed ends, one of said ends being provided with said feet thereof,

said bottom having a well therein for each leg respectively for receiving the feet thereof when the leg is in its retracted position,

said mounting means securing the other of said ends of the legs to said vessel for swinging movement of each leg between its retracted and extended positions, and for longitudinal shifting of each leg toward and away from said vessel.

4. The invention of claim 2,

each of said structures being operable to permit detachment of the corresponding leg from the vessel and re-attachment thereto with the feet of the leg in reversed orientation,

said bottom being concave and having two pairs of opposed margins,

said concavity extending between one of said pairs of margins,

each of said legs being disposed adjacent a corresponding margin of said one pair,

said gripper means comprising a plurality of projections on each of said feet,

the projections of one foot of each leg, when the latter is retracted and attached to the vessel with the feet thereof in said reversed orientation, extending downwardly for engagement with said hump.

5. For use with a motor vehicle having a transversely convex drive shaft hump extending fore and aft of the vehicle, a liquid container comprising:

a vessel having an inlet provided with a cap, a valved outlet, and a bottom;

a pair of spaced legs adjacent said bottom secured to said vessel and having gripper means thereon engageable with said hump, whereby the container may be placed on the hump, straddling the latter, and thereby supported by the hump with said outlet accessible to occupants of the vehicle;

said bottom being polygonal and presenting four corners,

said vessel having a sidewall extending upwardly from said bottom,

there being four of said legs; and

means mounting each of said legs on said sidewall adjacent a corresponding corner for movement between a retracted position and any one of a number of extended, hump-engaging positions depending from said vessel, and including structure engaging each leg respectively for releasably maintaining the latter in a selected position independently of the other legs,

said bottom being concave, the concavity extending between one pair of said corners and the other pair thereof,

each of said legs having a pair of feet provided with said gripper means and facing outwardly in diverging directions when the leg is extended,

said bottom having a well therein for each leg respectively for receiving the feet thereof when the leg is in its retracted position.

References Cited

UNITED STATES PATENTS

1,973,226	9/1934	Rose et al.	248—188.9
2,663,472	12/1953	Belgau	224—42.1
2,899,162	8/1959	Young.	
3,002,665	10/1961	Allen	224—42.42
3,271,075	9/1966	Good	297—439
3,291,353	12/1966	Sobczak	224—42.42

ROBERT G. SHERIDAN, *Primary Examiner.*

R. J. SPAR, *Assistant Examiner.*