July 26, 1949. J. G. DUNNEBACK 2,477,512

SHIPPING PACKAGE

Filed Sept. 28, 1945

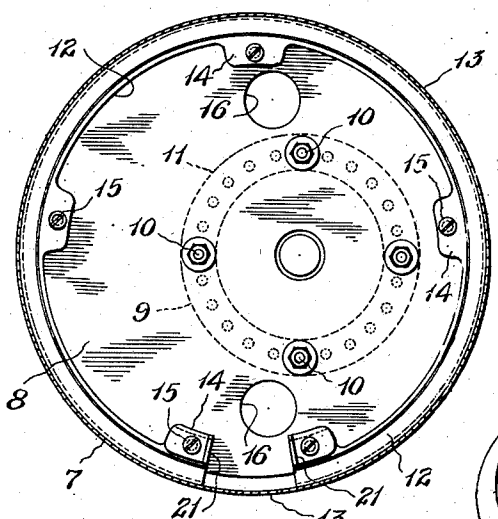



FIG. 2.

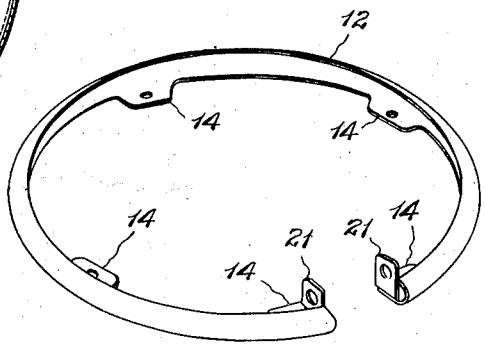



FIG. 5.

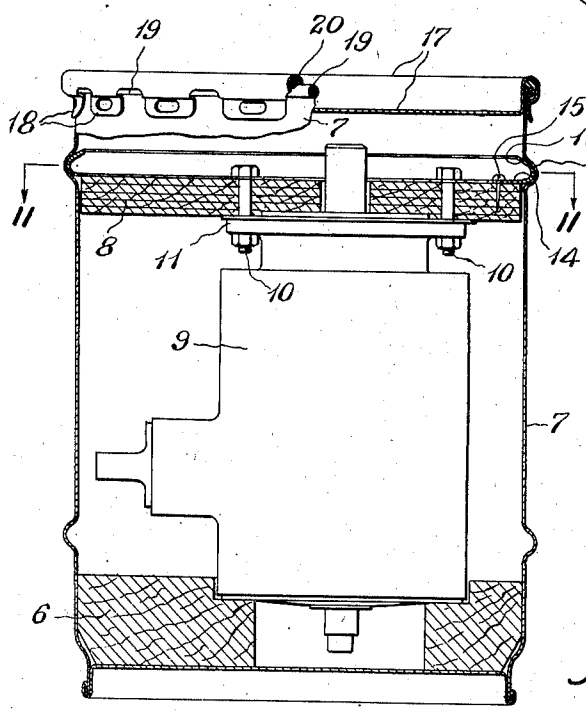



FIG. 1.

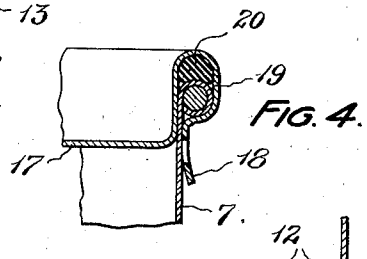



FIG. 4.

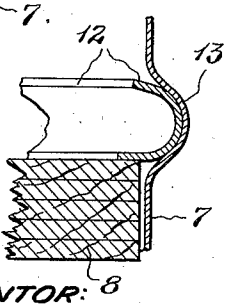



FIG. 3.

INVENTOR:
JOSEPH G. DUNNEBACK
BY
Spalding, Bruce & Wells
ATTORNEYS

Patented July 26, 1949

2,477,512

# UNITED STATES PATENT OFFICE

2,477,512

## SHIPPING PACKAGE

Joseph G. Dunneback, Shaker Heights, Ohio, assignor to J. & L. Steel Barrel Company, Pittsburgh, Pa., a corporation of New Jersey

Application September 28, 1945, Serial No. 619,041

1 Claim. (Cl. 206—46)

1

This invention relates to shipping packages and is especially suitable for use in shipping articles of great weight which must be firmly supported against damage such as might occur through rough handling. The packing elements here disclosed include some features that are disclosed also in my copending applications Serial Nos. 619,038 and 619,040.

One object of my invention is to provide a shipping package of such construction that the packaged articles will be rigidly supported and firmly anchored.

Another object of my invention is to provide a shipping package comprising parts so arranged that not only will the article shipped therein be more firmly supported and held against damage from rough handling than in the case of various other forms of packages, but the articles can, nevertheless, conveniently be incorporated within and removed from the container.

Other details, objects and advantages of the invention will become apparent as the following description of a present preferred embodiment thereof proceeds.

In the accompanying drawings I have shown a present preferred embodiment of the invention, in which

Figure 1 is a vertical cross-sectional view, partly in elevation of a shipping package;

Figure 2 is a horizontal cross-sectional view taken on the line II—II of Figure 1;

Figure 3 is a fragmentary vertical cross-sectional view to enlarged scale of a portion of the structure of Figure 1;

Figure 4 is a fragmentary vertical cross-sectional view to enlarged scale of another portion of the structure of Figure 1; and

Figure 5 is a perspective view of the locking ring of Figure 1.

A seating disc or block 6 is positioned within the lower end of the drum 7 and a supporting disc or plate 8 which may suitably be of laminated wood serves to hold the upper portion of the article 9 in centralized position and to resist endwise displacement thereof in the drum, the article 9 being connected to the disc 8 by bolts 10 that extend through the disc and through holes in a flange 11 that constitutes part of the article, which may, for example, be an electric motor.

The supporting disc 8 and its attached article 9 are held in place at the upper or outer end of

2

the drum by a ring 12 that seats within an internal groove or corrugation 13 of the drum wall. A snap ring can be substituted for the ring 12, as in the case of the split rings of the copending applications first above mentioned. However, for heavy articles such as machinery of the more massive forms, I prefer to employ a locking ring which will more positively hold the disc 8 in place. To this end, perforated ears 14 are formed on the ring whereby the ring is connected to the disc 8 by screws 15.

In assembling the package, the article 9 will first be bolted to the disc 8 and the parts inserted into the drum 7. Thereupon, the ring 12 will be inserted and expanded into place in its seat 13, and the screws 15 applied. A cover 17 will then be placed upon the container and will be held securely thereon by a series of lugs or tongues 18 formed on the edge of the cover and bendable into the position shown in Figure 4, or having snap engagement with a bead 19 on the upper edge of the drum, if they are of spring material. In any case, they will hold the lid tightly against a packing ring 20 that seats on the bead 19. No thrust is imposed against the inner side of the lid by the contents of the package.

In order to remove the article from the package, the screws 15 will be taken out and the ring 12 contracted to permit its withdrawal, upstanding lips 21 being provided thereon as convenient grasping elements by which they can be drawn toward one another to contract the ring. The disc 8 and the attached article 9 can then be lifted from the drum 7 by means of suitable finger holes 16 provided in the disc 8.

The term "drum" is employed herein largely as a matter of convenience; the casing or container shell need not necessarily be of cylindrical contour.

While I have shown and described a present preferred embodiment of the invention it is to be distinctly understood that the invention is not limited thereto but may be otherwise variously embodied within the scope of the following claim.

I claim:

A shipping package comprising a drum-like container, a supporting plate loosely fitting in the container, a seating surface on the inner wall of the container, a retaining element having a portion seated in said seating surface, means for fastening the plate to said element so that the plate is suspended therefrom and means for con-

necting an article to the plate, the seating surface being in the form of an annular groove coaxial with the container and the retaining element being in the form of a split ring insertible into the groove.

JOSEPH G. DUNNEBACK.

## REFERENCES CITED

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



UNITED STATES PATENTS


| Number | Name | Date |
|---|---|---|
| 1,449,276 | Felten | Mar. 20, 1923 |
| 1,689,588 | Hoy | Oct. 30, 1928 |
| 1,969,524 | Rollason | Aug. 4, 1934 |
| 1,992,950 | Horner et al. | Mar. 5, 1935 |
| 2,176,310 | Newton | Oct. 17, 1939 |
| 2,215,537 | Bjong | Sept. 24, 1940 |
| 2,300,259 | Kueppers | Oct. 27, 1942 |
| 2,321,063 | Bohnke | June 8, 1943 |