Aug. 9, 1927. 1,638,446

J. H. LE BEL

FUNNEL

Filed Sept. 25, 1926

Fig. 1.

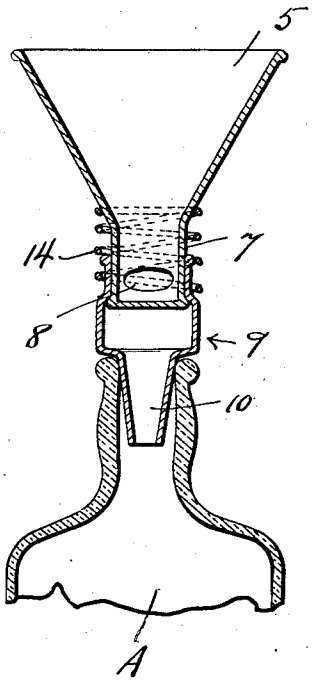


Fig. 2.

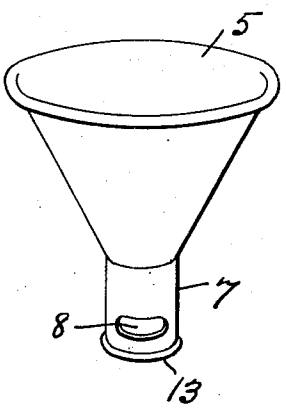
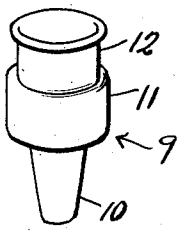


Fig. 3.



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FUNNEL.

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This invention relates to new and useful improvements in funnels and has for its primary object to provide a funnel that is so constructed as to normally prevent the material from discharging therefrom, means being provided, and said construction further being such as to enable the material to discharge from the funnel when desired.

By reason of a construction of this character, it is possible to gauge the general amount of material that is desired to be poured into a bottle or other container by reason of the funnel.

A further object of the invention resides in the provision of a funnel that may be employed as above indicated, that is extremely simple of construction and that may be manufactured and marketed at a cost but slightly in advance of the conventional funnels now in use.

Other objects and advantages of the invention will become apparent from the following description and taken in connection with the accompanying drawing.

In the accompanying drawing forming part of this application:—

Figure 1 is a detail vertical section of a funnel constructed in accordance with the present invention, the same being shown as disposed within the neck of a bottle,

Fig. 2 is a perspective of one element of the funnel, while

Fig. 3 is a perspective of a nipple member within which the neck of the funnel is arranged.

Now having particular reference to the drawing, 5 designates a conical-shaped funnel of any size, constructed, with the usual neck 7, which in the present instance is untapered and closed at its bottom as indicated in Fig. 1, said neck being formed at one side with an opening 8.

The invention further consists of a nipple 9 of material similar to the material of the funnel 5, said nipple being formed at its lower end with a tapered discharge nozzle 10 for permitting the same to be arranged within the neck of a bottle or other container A. Said nipple is formed centrally with an enlarged cylindrical portion 11 while said nipple is formed at the top of said enlarged portion with a retracted neck 12 within which is slidable the neck 7 of the funnel 5.

The lower end of the funnel neck 7 is beaded as at 13 which bead will abut the lower end of the neck portion 12 of said nipple 9 when the funnel is raised to prevent the entire dis-association of the funnel with respect to said nipple.

Surrounding the neck portion 12 of the nipple 9 is an expansible coiled spring 14 that extends upwardly and contacts the main body portion of the funnel so as to normally maintain said funnel in an upward direction within said nipple for obviously closing the opening 8 of the funnel neck 7.

When the funnel is positioned with respect to the nipple as indicated in Fig. 1, material may be discharged into the funnel without any liability of the same escaping therefrom. However, after the nozzle 10 of the funnel nipple has been arranged within the neck of the bottle or other container and the funnel forced downwardly the opening 8 of the funnel 7 will be within the enlarged portion 11 of the nipple and consequently the material will be permitted to escape therefrom.

It will thus be seen that I have provided a highly novel, simple and inexpensive form of funnel that is well adapted for all of the purposes heretofore designed, and even though I have herein shown and described the invention as consisting of certain details of structural elements, it is nevertheless to be understood that some changes may be made therein without affecting the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new is:—

1. In a funnel of the character described, a funnel body having a discharge neck at the lower end thereof, said discharge neck being closed at its lower end and being provided with an opening at its side, a nipple for association with the neck of the funnel, said nipple being provided with a nozzle and an enlarged central area, the upper end of which is reduced for providing a neck, the neck of said funnel adapted for relatively tight fitting relation within the neck of the nipple and to close the opening in the neck of the funnel, when the funnel is raised with respect to said nipple, said enlarged area opening the funnel to the nipple, so that the material may discharge through the said nipple nozzle.

2. In a funnel of the character described,

a funnel body having a discharge neck at the lower end thereof, said discharge neck being closed at its lower end and being provided with an opening at its side, a nipple for association with the neck of the funnel, said nipple being provided with a nozzle and an enlarged central area, the upper end of which is reduced for providing a neck, the neck of the said funnel adapted for relatively tight fitting relation within the neck of the nipple and to close the opening in the neck of the funnel when the funnel is raised with respect to said nipple, said enlarged area opening the funnel to the nipple, so that the material may discharge through the said nipple nozzle, and spring means for maintaining the neck of the funnel within the neck of said nipple so as to close the opening in said funnel neck.

3. In a funnel of the character described, a funnel body having a discharge neck, the lower end of which is closed, said neck being provided with an opening, a nipple constructed for association with said funnel and including a nozzle for engagement within the container to be filled, a central enlarged area, and a retracted neck portion within which the neck of the funnel is adapted for frictional engagement, whereby the opening of the neck is maintained closed and means for normally maintaining the neck of the funnel within the neck of said nipple.

In testimony whereof I affix my signature.

JOSEPH HENRY LE BEL.