This invention relates to a closure cap for bottles combined with a sipping straw so that on removal of a portion of the cap a straw will be immediately available for use and need not be separately supplied. Among important objects of the invention are the following:

To provide a closure device as stated so designed that the straw will be available without requiring that the cap be entirely removed;

To expose the straw for use without requiring that a bottle opener or the like be employed for partially removing the cap;

To effect the full sealing of the straw within the bottle awaiting use so that it will be in a clean, hygienic and sanitary condition as long as the bottle is sealed;

To so dispose the straw relative to the cap and bottle while it is awaiting use as to maintain the upper end of the straw dry, wholly apart from the bottle contents;

To provide a combination bottle closure and straw that will be applicable to conventional bottles without requiring modification or redesign of said bottles;

To provide a combined cap and sipping straw that prevents spillage of the contents and that is readily removed from the bottle as a unit; and

To form the combination article at relatively low cost, considering the benefits deriving from the use thereof.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a fragmentary perspective view of the bottle with a modified form of combined closure and straw applied thereto in sealed position.

Fig. 2 is an enlarged section on line 2—2 of Fig. 1.

Fig. 3 is a view like Fig. 1 in which the seal has been broken and the straw lifted, and shown in operative position in dot-dash lines.

Fig. 4 is an enlarged perspective view showing the upper portion of the lifted straw being readied for use.

Fig. 5 is an exploded perspective view of the bottle and combined closure and straw.

Fig. 6 is a fragmentary perspective view of the bottle with a modified form of combined closure and straw applied thereto in sealed position.

Fig. 7 is a view like Fig. 6 in which the modified cap has been opened and the straw lifted.

Fig. 8 is an enlarged section on line 8—8 of Fig. 7, showing the end of the straw bent.

Referring to the drawings in detail, a conventional bottle 10 is shown in Fig. 1 capped by a closure 11 according to the invention. The closure includes a circular, flat, compressible gasket 12 of cork or like material having an off-center opening 14 in which is snugly engaged the upper end portion of a sipping straw 16 of flexible plastic, paper, or the like. The portion 18 of the straw that extends beyond the opening is bent over at right angles to the length of the straw and flattened against the top surface of the gasket. An air vent 19 is formed in the gasket 12.

A crown cap 20 is formed with a depending, corrugated, circumferential flange 23 sealably engageable about the usual bead provided at the mouth of the bottle.

Formed in the flat body portion of the cap is a wide, diametrically extending slot 24, the ends of which terminate at the circumference of said body portion. A thin foil liner 26 is engaged between the body portion of the cap and the gasket, and the cap, liner and gasket are connected together by a suitable cement or adhesive.

Liner 26 is of disc shape and, as best shown in Fig. 5, is formed with a radial tongue 28 of a width closely approximating that of slot 24. The tongue has straight side edges substantially in registration with the sides of the slot and aligned with said side edges are parallel score lines 30 that extend fully across the liner at opposite sides of and symmetrically with respect to the center of the liner.

The liner is exposed through the slot and it will be readily apparent that when the cap is secured to the bottle neck, the flattened end portion 18 of the straw may be forced into the material of the gasket, as best shown in Fig. 2. Therefore, the bottle will be tightly sealed while awaiting use, with the straw fully enclosed and protected in a sanitary manner against the entry of foreign matter.

In use, one pulls upwardly on the tab or tongue 28 and tears the exposed portion of the liner along the score lines 30, as shown in Fig. 3. No tools are necessary and the cap need not be completely removed.

This exposes the flattened end 18 of the straw, which is now grasped and pulled upwardly. The flattened end of the straw is now swung upwardly into alignment with the remainder of the length of the straw and squeezed between the thumb and index finger as shown in Fig. 4 to ready the straw for use.

In Figs. 6—8 there is illustrated a modification wherein a cap of tearable material has a depending, corrugated flange 33 integrally formed with a tongue or tab 32. A wide tear strip 34 is integral with the tab, being defined in the material of the flange and body portion between parallel scored or weakened lines 36 provided in the cap. An air vent 38 is formed in the gasket 12.

The liner 26 is not used in this form, and the flattened end 18 of the straw 16 is engaged directly by and between the tear strip and the cork liner. Therefore, when the tear strip is pulled up in the manner shown in Fig. 7, the straw is exposed to be lifted, straightened, and opened as previously described.

The portion 18 of the straw 16 may also be left fully tubular and permitted to snap up into alignment with the sipping straw 16 when the liner is opened by the tongue 28 of the form of Fig. 1.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A combined closure and sipper for bottles comprising a cap adapted for sealing engagement with a bottle, a sealing gasket underlying the cap and having an opening and an air vent, and a straw extending through said opening and terminating at one end between the gasket and cap, said closure further including a liner interposed between the cap and the gasket and overlying said end of the straw, said end of the straw being extended
3. A combined closure and sipper for bottles comprising a cap of tearable material adapted for sealing engagement with a bottle, a sealing gasket underlying the cap and having an opening and an air vent, and a straw extending through said opening and terminating at one end between the gasket and cap, the cap including score lines defining a tear strip thereon, said end of the straw underlying the tear strip so as to be exposed on removal of the strip, the cap including a depending tab constituting an extension of the tear strip to provide a handle when the tear strip is to be removed.

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angularly to the remainder of the length of the straw and being flattened against the gasket, the liner having a tab extending radially outwards of the cap, the cap being formed with a diametrically extending slot through which the tab projects, the liner being of a readily tearable material for tearing the same and removing a portion thereof responsive to pull on the tab, said end of the straw being disposed below and aligned with the slot and the remov-able portion of the liner and adapted to be exposed responsive to removal of said liner portion.

2. A combined closure and sipper for bottles comprising a cap of tearable material adapted for sealing engagement with a bottle, a sealing gasket underlying the cap and having an opening, and a straw extending through said opening and terminating at one end between the gasket and cap, said end of the straw being extended angularly to the remainder of the length of the straw and being flattened against the gasket, the cap including score lines defining a tear strip thereon, said end of the straw under-lying the tear strip so as to be exposed on removal of the strip, the cap including a depending tab constituting an extension of the tear strip to provide a handle when the tear strip is to be removed.