

Nov. 6, 1934.

H. F. SANDS

1,979,411

SOAP BAR

Filed Dec. 21, 1933

*Fig. 1.*

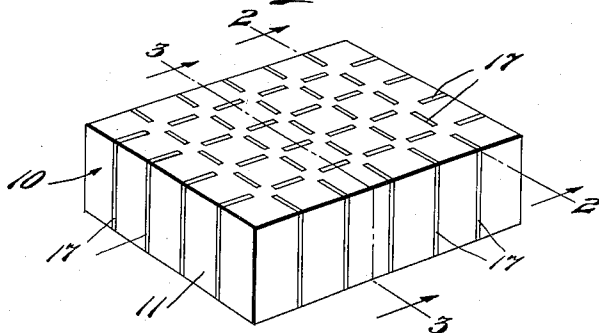


*Fig. 2.*

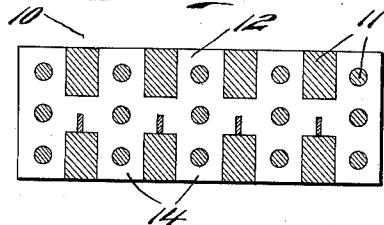


*Fig. 3.*

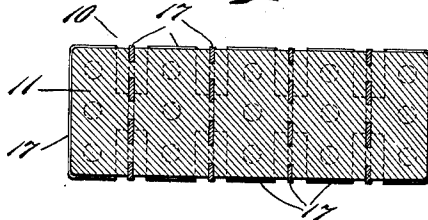


*Fig. 4.*

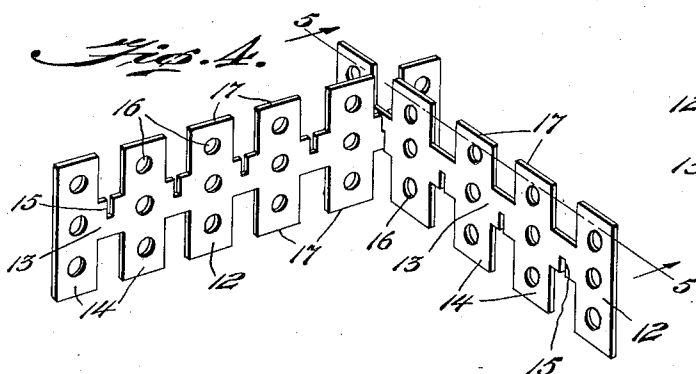
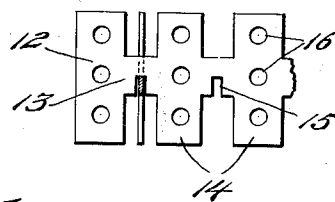


*Fig. 5.*



*Inventor*  
*Henry F. Sands*  
*By Horatio E. Bellows*  
*Attorney*

## UNITED STATES PATENT OFFICE

1,979,411

SOAP BAR

Henry F. Sands, Warwick, R. I.

Application December 21, 1933, Serial No. 703,361

15 Claims. (Cl. 87—23)

My present invention relates to improvements in the construction of soap bars, and has particular reference to soap bars suitable for removing dirt and grime from the hands.

Soap bars which have heretofore been manufactured for scrubbing purposes have included abrasive ingredients which have not been suitable for delicate skins, and have roughened the hands of a user. It is the principal object of my invention to provide a soap bar construction which will facilitate the removal of dirt and grime without, however, abrading or roughening the hands of the user.

The soap bars, as at present manufactured, have also been subject to another disadvantage in that there is no firm support for the soap material; it has therefore been impossible to use a relatively soft base soap. A further object of my invention is to provide a reinforcing or strengthening structure for the soap bar which will enable the bar to retain its shape at all times and will therefore permit the use of standard soap mixtures, and also of soap mixtures for special purposes which may have a relatively soft body.

With the above and other objects and advantageous features in view, as will hereinafter appear, my invention consists of a novel arrangement of parts more fully described in the detailed description following, in conjunction with the accompanying drawing, and more specifically defined in the descriptions appended thereto.

In the drawing,

Figure 1 is a perspective view of the novel soap bar;

Figure 2 is a transverse section therethrough on line 2—2 of Figure 1;

Figure 3 is a section of the bar after use taken on a line corresponding with line 3—3 of Figure 1 in order to better disclose the projecting edges of the scrubbing ingredient, these edges being for illustrative purposes exaggerated in height;

Figure 4 is a perspective view of two of the scrubbing elements, showing their locking relationship; and

Figure 5 is a fragmentary section on line 5—5 of Figure 4.

It has been found desirable to construct a soap bar so as to permit a gentle, non-abrasive scrubbing section, and at the same time to include a support for the soap material. I have, therefore, incorporated a scrubbing ingredient into a soap bar, comprising a substance which will wear away at about the same rate as the soap material, but will present a plurality of

scrubbing edges to contact the hands of the user and rapidly remove dirt and grime therefrom. The scrubbing ingredient is non-abrasive, a preferred material being thick wood pulp paper, and this scrubbing ingredient is incorporated in the soap bar as a plurality of interlocking strips which may also be bound with the soap material; the division of the scrubbing material into a plurality of interlocked strips provides a support for the soap material which extends throughout the length and breadth of the soap bar.

An illustrative embodiment of my invention is shown in the drawing, the novel soap bar being designated by the reference character 10, and including the soap material 11, in which a plurality of scrubbing strips 12 are firmly embedded, these elements being closely spaced and extending lengthwise and crosswise of the soap bar, as indicated in Figure 1. Each strip 12 is stamped or otherwise formed from a sheet of scrubbing material, and includes a central section 13 and a plurality of spaced sections 14, extending laterally therefrom, the central section being slotted on one side intermediate the spaced sections, as indicated at 15.

It is therefore possible to lock the sections together, as indicated in Figure 4, with the slots 15 of the interlocking sections in alignment and contacting the solid portions of the center section adjacent the slots, whereby the scrubbing strips may be interlocked and the soap material molded therearound so as to permanently imbed the interlocked sections therein. If desired, the sections may be provided with a plurality of openings 16 for permitting inclusion of the soap material during the molding operation, in order to thoroughly interlock and band the sections with the soap material as well as with each other.

The novel soap bar thus includes a plurality of scrubbing strips which are permanently imbedded therein, these strips having a multiplicity of spaced edges, designated as 17 in the drawing, which form part of the bar surfaces and contact the skin of the user when washing the hands to exert an effective scrubbing action for assisting in the removal of dirt and grime. As the soap wears down, these edges will always project slightly above the surface of the soap bar, but will wear away at about the same rate as the soap material; the projecting edges, however, constantly present a criss-cross of dirt and grime removing bands which persist until the soap bar is completely used, as the strips also serve to

support the soap material and maintain it in proper shape during the entire life of the soap bar.

If desired, the scrubbing strips may be arranged in different designs, as for example for spelling the name of the manufacturer or the like, as it is evident that the name will persist in view until the soap bar is entirely worn out.

While I have illustrated and described a specific arrangement of scrubbing elements in a soap bar, and have indicated that a preferred scrubbing material is paper made out of short fiber material such as wood pulp so as to permit a wearing away at the same rate as the soap material, it is obvious that desired changes in the shape and form of the scrubbing strips, in the character of the material forming the strips, and in their relative positioning within the soap bar, may be made as desired, within the spirit and the scope of my invention as defined in the appended claims.

I claim:—

1. In a soap bar, soap material, and a plurality of elements of short fibre material embedded therein, said elements extending longitudinally and transversely of said bar and extending to the upper and lower surfaces thereof, whereby said elements present scrubbing edges as the soap material wears away.

2. In a soap bar, soap material, and a plurality of interlocked elements embedded therein, said elements extending longitudinally and transversely of said bar and extending to the upper and lower surfaces thereof, whereby said elements present scrubbing edges as the soap material wears away.

3. In a soap bar, soap material, and a plurality of elements in the form of strips embedded therein, said elements extending longitudinally and transversely of said bar and extending to the upper and lower surfaces thereof, whereby said elements present non-abrasive scrubbing edges as the soap material wears away.

4. In a soap bar, soap material, and a plurality of inter-locked elements in strip form and embedded therein, said elements extending longitudinally and transversely of said bar and extending to the upper and lower surfaces thereof, whereby said elements form a support for the soap material adapted to be worn away during use of the soap bar at substantially the same rate of wear as the soap material.

5. In a soap bar, soap material, and a plurality of elements of strip form and having spaced sections and embedded therein, said elements extending longitudinally and transversely of said bar and said spaced sections extending to the surfaces of the bar, whereby said sections present scrubbing edges as the soap material wears down.

6. In a soap bar, soap material, and a plurality of interlocked elements of strip form and having spaced sections and embedded therein, said elements extending longitudinally and transversely of said bar and said spaced sections extending to the surfaces of the bar, whereby said sections present non-metallic scrubbing edges as the soap material wears down.

7. In a soap bar, soap material, and a plurality of interlocked elements in strip form and having spaced sections and embedded therein,

said elements extending longitudinally and transversely of said bar and said sections extending to the surfaces of the bar, said elements having slots between said sections, whereby said sections present non-metallic non-abrasive scrubbing edges as the soap material wears down.

8. In a soap bar, soap material, and a plurality of interlocked elements of strip form embedded therein, said elements extending longitudinally and transversely of said bar and said sections extending to the surfaces of the said bar, said elements having slots between said sections and openings for receiving soap material, whereby the elements and the soap material are banded together, said elements being rigid with respect to the soap material to form a supporting structure therefor.

9. In a soap bar, soap material, an element embedded in the soap material and extending transversely of the bar and terminating at the upper and lower surfaces thereof, and a second element embedded in the soap material and extending transversely of the first element and also terminating at the upper and lower surfaces thereof, and locked to said first element, said elements forming a supporting structure for the soap material adapted to wear away during use of the soap bar at substantially the same rate of wear as the soap material.

10. In a soap bar, soap material, and a structure embedded in the soap material and having portions extending longitudinally and transversely of the soap bar, said longitudinal and transverse portions terminating at the upper and lower surfaces thereof, said portions being of relatively rigid non-abrasive material.

11. In a soap bar, soap material, and a structure of soft fibre material embedded in the soap material and having portions extending longitudinally and transversely of the soap bar, said longitudinal and transverse portions terminating at the upper and lower surfaces thereof.

12. In a soap bar, soap material, and a structure of soft fibre material embedded in the soap material and having portions extending longitudinally and transversely of the soap bar, said longitudinal and transverse portions terminating at one of the surfaces thereof.

13. In a soap bar, soap material, and a structure of relatively rigid material embedded in the soap material and having portions extending longitudinally and transversely of the soap bar, said longitudinal and transverse portions terminating at one of the surfaces thereof.

14. In a soap bar, soap material, and a structure of relatively rigid non-abrasive material embedded in the soap material and having portions extending longitudinally and transversely of the soap bar, said longitudinal and transverse portions terminating at one of the surfaces thereof.

15. In a soap bar, soap material, and a structure of strips embedded in the soap material and having portions extending longitudinally and transversely of the soap bar, said longitudinal and transverse portions terminating at one of the surfaces thereof, said strips present scrubbing edges at the surface at which they terminate as the soap material wears away.

HENRY F. SANDS.