June 2, 1925. 1,540,268

W. A. LORENZ

PAPER WASHCLOTH

Filed July 8, 1920

Fig. 1.

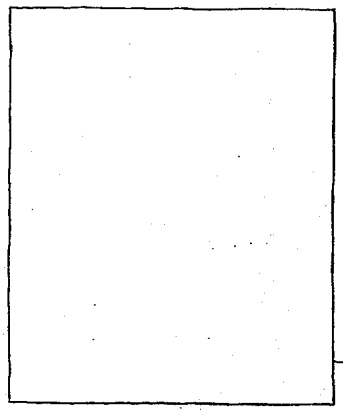


Fig. 2.

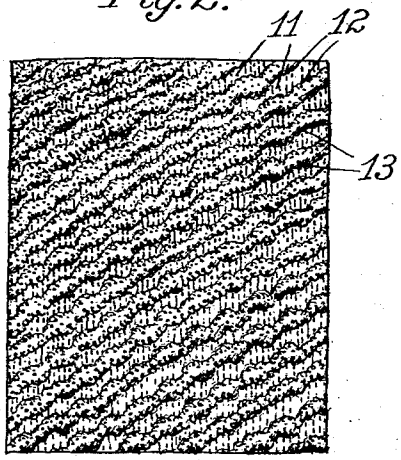


Fig. 3.

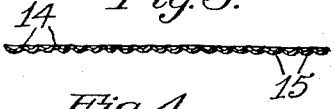


Fig. 5.

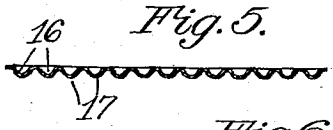


Fig. 4.

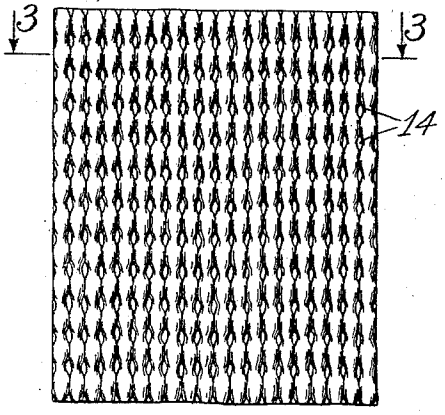
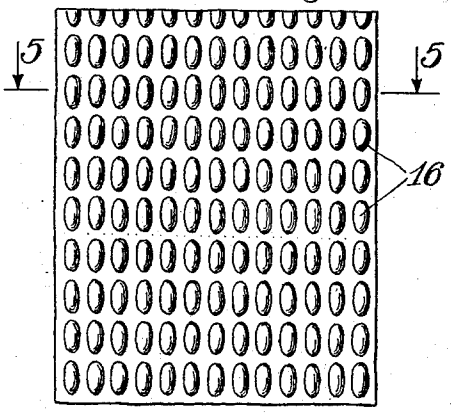


Fig. 6.



Inventor:
William A. Lorenz
by B. C. Stickney
Atty.

Patented June 2, 1925. 1,540,268

UNITED STATES PATENT OFFICE.

WILLIAM A. LORENZ, OF HARTFORD, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE OTAKA PAPER COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF DELAWARE.

PAPER WASHCLOTH.

Application filed July 8, 1920. Serial No. 394,728.

To all whom it may concern:

Be it known that I, WILLIAM A. LORENZ, a citizen of the United States, residing in Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Paper Washcloths, of which the following is a specification.

This invention relates to a wash-cloth, and one of its main features is to make a napkin, to be used as a wash-cloth, successfully of paper having thereon a coating of soap; to render the paper not liable to disintegrate rapidly when wetted, and to make it efficient for scrubbing the hands, etc.

Thus an object of the invention is to provide a device which will have the requisite strength even when wet, but which will not be open to the objection of undue stiffness and difficulty of use because of the original strength of the paper; and which will remove the dirt rapidly and easily.

In producing the wash-paper, I employ manila or kraft or other strong, tough paper or heavy quality, which will preserve its integrity when wet and put to use for scrubbing; and, in order to overcome the difficulty of handling the heavy, tough paper, it is rendered flexible by crinkling or embossing or otherwise gathering the same. Other methods of treating the wash-paper may be used, as for example the method set forth in my pending United States application, No. 346,310, filed December 20, 1919, in which the paper is formed into longitudinal corrugations which are transversely crinkled.

The embossing or the corrugating and crinkling render the paper flexible and at the same time capable of locally stretching, without liability of rupturing, and hence it meets the requirements of a wash-cloth, which is apt to be crumpled and bent and roughly used. The danger of rupture is increased by the fact that the paper is made wet and therefore substantially softened and weakened when put to use. The embossings, corrugations or crinkles also serve to retain a substantial supply of the soap coating, and are further relied upon to serve as riffles in scouring and cleaning, the numerous regular or irregular projections or embossings upon the paper meeting this requirement in a most satisfactory manner. The invention, however, is not limited to paper which is embossed, corrugated and crinkled in any particular manner. The riffles are advantageous, inasmuch as a sheet of paper to which soap has been applied, if smooth, and especially if the same be tough and stiff, is apt to slip over the hands when wet, and not to clean the hands; but the preferred form of wash-paper herein disclosed proves successful.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 shows a portion of suitably strong paper in its original condition, for forming into a wash-napkin.

Figure 2 shows a portion or sheet of paper which has been provided throughout with embossings, or raised and depressed portions, which render the same flexible and which also are in the nature of riffles adapted for scouring purposes.

Figure 3 is an edge view, and Figure 4 is a plan of a wash-napkin having a regular pattern of riffling embossed thereon, the pattern including figures which are raised on both sides of the paper.

Figure 5 is an edge view, and Figure 6 a plan of a wash-napkin and embossings thereon which rise up on only one side of the paper, and which have the effect of making both surfaces of the paper riffled or uneven.

An original sheet of paper 10, which may be suitably tough and of suitable weight, may be embossed or otherwise provided with riffles or sharp, uneven surfaces, as for example, by forming thereon irregular ridges 11 and depressions 12, and, if desired, the paper may have short wrinklings 13 transverse to the lines of the elevations and depressions 11, 12. The sheet may then be coated with dissolved soap, and then dried, when it is ready for use.

Other patterns of elevations and depressions or riffles are seen at Figures 3 to 6. In Figure 3 may be seen a regular pattern, in which embossed figures 14 are raised from the upper surface, and corresponding figures 15 are depressed below the under surface. In Figures 5 and 6 oval depressions or figures 16 are embossed in the sheet, making raised figures 17 on the under side of the sheet, both sides being thus provided

with riffles or unevenness. Any of the designs shown in the various figures will impart to the wash-napkin the desired scrubbing quality, and other designs may be adopted.

The novel napkin may be used as a wash-cloth for scrubbing the hands, the same as can be done with an ordinary wash-cloth; and for this purpose there is used paper which does not disintegrate before opportunity is afforded to use it fully for scrubbing purposes. Inasmuch as the paper is not readily disintegrable in water, and is originally too stiff to use as a wash-cloth, it is formed into riffles thereby not only softening the paper so that it can be used as a wash-cloth, but also forming projections that conduce to its efficiency as a scrubber. By means of this device, the soap is brought directly to the hands and face of the user, without the delay of first soaping water in a basin, and without the necessity of handling a soft mass of pulp in the wash water.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. A napkin to be used as a wash-cloth for applying soap and scrubbing the surface to be cleaned, consisting of a sheet of tough paper not readily disintegrable in water and having riffles formed in it for softening the same said paper being originally too tough and heavy for such use and having a dried coating of soap.

2. The method of forming a napkin to be used as a wash-cloth, comprising crinkling, bending or embossing heavy, tough paper not readily disintegrable in water, to render it flexible and provide it with scrubbing riffles, and coating the same with a solution of soap and then drying the same.

WILLIAM A. LORENZ.

Witnesses:

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