

UNITED STATES PATENT OFFICE.

EDWARD PARRISH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PAPER FOR NAPKINS AND OTHER ARTICLES.

Specification forming part of Letters Patent No. 115,511, dated May 30, 1871.

I, EDWARD PARRISH, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a Paper Substitute for Towels, &c., of which the following is a specification:

Nature and Object of the Invention.

My invention consists of paper treated, substantially as described hereafter, so as to render it serviceable as a substitute for towels, napkins, table-cloths, &c.

General Description.

In carrying out my invention I employ ordinary paper-stock; that used in the manufacture of printing-paper, for instance, will serve the desired purpose.

The pulpy web formed in common paper-machines, and sometimes termed the water-leaf, assumes a crimped or puckered character if allowed to pass from the machine without being subjected to the pressure-rolls, the web having irregular transverse ribs, so that the surface partakes somewhat of the character of the coarse textile fabrics used for towel-eling, &c. When this puckered web is dry, however, it is of too stiff a nature to be used as a substitute for towels; but by a process of rubbing and kneading I so loosen the fibers of the fabric, without tearing the same, that it assumes a pliability equal, or nearly so, to that of Japanese paper made from the bark of the white mulberry tree, while it retains the rough ribbed surface. The loosening of the fibers may be accomplished in a variety of ways. The dried and puckered water-leaf may, for instance, be cut to the desired size and shape, and rubbed on an ordinary fluted wash-board, and I have effectually loosened the fibers without tearing the paper by subjecting it to the action of a common washing-machine. While towels, napkins, &c., made of paper thus treated cannot withstand the combined wear and tear which those made of textile fabric can resist, the paper towel can be used once for wiping the hands and face after washing, and hence it is well adapted to the use of travelers as a cleanly substitute for the towels which frequently have to do duty for a host of hasty travelers, for a number of the paper towels can be made up into conven-

ient parcels for being packed with other toilet articles in traveling-bags, valises, &c.

The paper towels may be fringed at the edges, or perforated, embossed, printed, or otherwise ornamented; or the prepared paper may be converted into neat and serviceable napkins for table use, or into table and other cloths; and, in fact, the softened water-leaf can be employed in surgical treatments, and may be applied to many domestic and personal uses. As regards economy, although it can be used but once or twice at most as a towel, its cost will barely equal that of washing an ordinary towel.

My invention can be carried into effect by first crimping ordinary calendered printing-paper and afterward loosening the fibers in the manner described; but I prefer the use of the above-mentioned puckered water-leaf, as it is in a better condition for being kneaded and rendered pliable by the loosening of the fibers than the more compact and fragile calendered paper. The water-leaf, moreover, retains, after the rubbing and loosening of the fibers, that rough surface so desirable in towels, napkins, &c.

A coarse, but pliable and serviceable, substitute for coarse cloths may be made from the water-leaf of brown or Manila paper by treating the same in the manner described.

I do not claim, broadly, treating paper or paper-leaf by means of crimping or other rollers, so as to produce a flock-like surface, which would render it unserviceable for the purposes to which I apply it; but

I claim—

1. A fabric, from which to make a substitute for woven towels, &c., consisting of the web or water-leaf dried after passing from the machine, without being pressed, and treated as set forth.

2. As a new manufacture, a sheet of said paper, having a wrinkled surface and forming a substitute for a woven towel or napkin.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD PARRISH.

Witnesses:

WM. A. STEEL,
J. RUPERTUS.