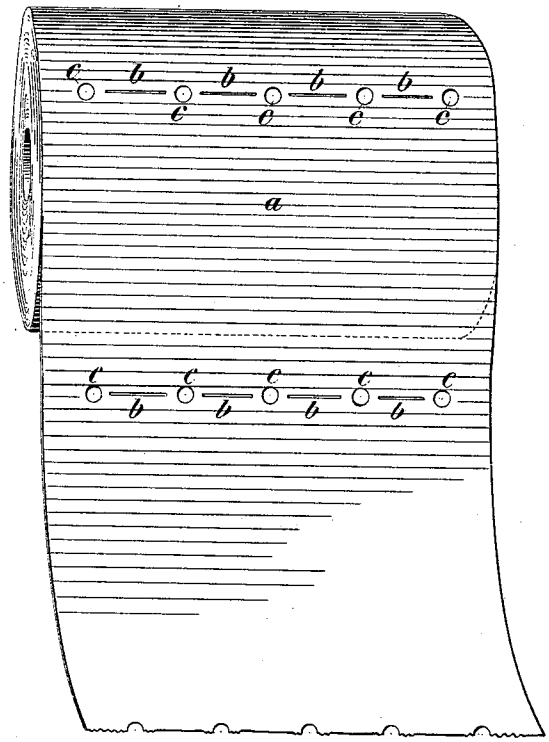
(No Model.)

S. WHEELER.

TOILET OR WRAPPING PAPER.

No. 386,618. Patented July 24, 1888.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SETH WHEELER, OF ALBANY, NEW YORK.

TOILET OR WRAPPING PAPER.

SPECIFICATION forming part of Letters Patent No. 386,618, dated July 24, 1888.

Application filed November 3, 1887. Serial No. 254,137. (No model.)

To all whom it may concern:

Be it known that I, SETH WHEELER, a citizen of the United States, and a resident of the city and county of Albany, in the State of New York, have invented a certain new and useful Improvement in Toilet and Wrapping Paper, of which the following is a specification, reference being had to the accompanying drawing, forming part thereof.

In the use of perforated paper as heretofore made there have been two objections raised to it by consumers: First, that it will not in all cases separate squarely on the line of the perforations, some care being required to avoid tearing into and injuring, if not spoiling, one or both sheets; secondly, that with the most perfect machinery for perforating in the ordinary manner more or less of the small pieces it is intended to cut from the sheet adhere sufficiently to be carried along and wound up in the roll, and next appear on the counter of the store or the floor of the bath or toilet room, to the annoyance of the tidy shop or house keeper. This becomes more serious when the perforating machinery becomes worn or dulled, causing a considerable number of the punchings to adhere.

The cost of the perforating punches and dies, owing to their large number and close order, is large. They are difficult to sharpen at the best, but when much worn frequent sharpening is imperative, as, unless the cutting-edges are in the best condition, the most of the punchings will adhere. The use of knives for incising instead of taking out a piece of the paper would overcome the objections noted, but a greater one then appears, in that the line of separation is not readily seen.

It is evident that the first objection is due to the large number and width of the points of connection between the sheets. The first might be reduced by enlarging the openings, but at a waste of paper and increased difficulty in keeping the machinery in order, while to reduce the width of the connecting-points is impracticable, as, as at present made, the die and stock holding the punches are so nearly cut in two that it is a delicate affair to handle.

I find that a combination of the incisions and perforations, as shown in the drawing, is a complete solution of the problem, reducing the number of perforations to a minimum, only sufficient being required to indicate the line of separation. An incisor-knife connecting (or nearly so) the perforation, the uncut or connecting points may be as narrow as may be desired, and as this number too is reduced to a minimum it is clear no care will be required to separate the sheets properly; neither need there be any litter due to the punchings, and the cost of the dies, &c., as well as the difficulty of maintaining them in working order is materially lessened.

My improvement therefore consists in a roll of toilet or wrapping paper containing lines of weakness of combined alternate perforations and incisions.

In the drawing is shown a roll of paper containing my improvement.

a is the roll of paper. *b b*, &c., are a series of incisions. *c c*, &c., are perforations made between the ends of the incisions, all in the same line.

The ends of each incision *b* almost reach up to the perforations adjacent, so that a slight pull upon the paper will very readily separate the sheet, much more readily than if it were a line of perforations all the way across the paper. This reduces the number of perforations in the line of weakness of the sheet, thereby avoiding litter from pieces of partially-cut paper. At same time the number of perforations left, in combination with the incisions, enables the person tearing off the paper to readily see the line of weakness.

I claim—

A roll of toilet or wrapping paper containing lines of weakness, each of which is made up of perforations plainly indicating the position of the line, combined with incisions to increase the weakness of the line and avoid litter, substantially as described.

SETH WHEELER.

Witnesses:
ROBT. H. MARSHALL,
ANDREW M. TODD.