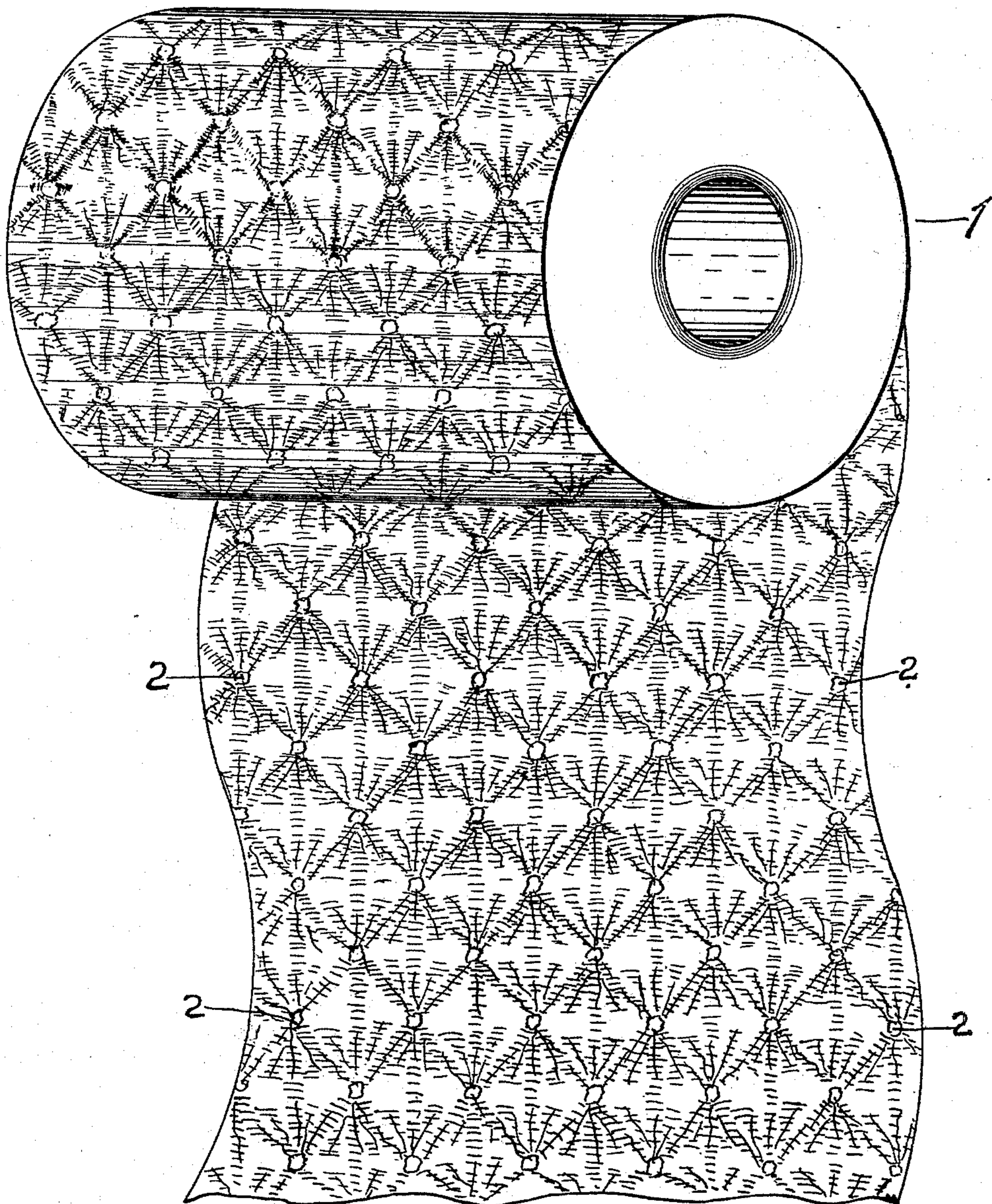


(No Model.)

S. WHEELER.
ORNAMENTED PAPER.

No. 496,964.

Patented May 9, 1893.



Witnesses
J. F. Harris.
A. M. Turner

Inventor
Seth Wheeler.
By his Attorney
W. M. Brown,

UNITED STATES PATENT OFFICE.

SETH WHEELER, OF ALBANY, NEW YORK.

ORNAMENTED PAPER.

SPECIFICATION forming part of Letters Patent No. 496,964, dated May 9, 1893.

Application filed September 9, 1892. Serial No. 445,418. (No specimens.)

To all whom it may concern:

Be it known that I, SETH WHEELER, a citizen of the United States, residing at Albany, Albany county, New York, have invented certain new and useful Improvements in Ornamented Paper as a New Article of Manufacture; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a new article of manufacture, viz: ornamented paper, fibrous material or analogous substance, having its substance permanently wrinkled, and preferably wrinkled so as to form practically clear and distinct figures or ornamentations, such as, for instance, diamonds, stars, and any other ornamental figure desired.

The figure shows a side elevation of a roll of paper ornamented showing one form of my invention.

The numeral 1 shows the roll of toilet paper partly unrolled that the ornamentation of the paper may be plainly seen. At 2 will be seen spots or points, and as arranged or distributed over the paper, they produce a diamond-shaped ornamental figure. In operating on paper already manufactured, the spots or points 2 are first dampened by touching the paper or material at different points with a damp substance, such as water, or by sprinkling, if desired, or in any manner to cause the points touched to possess an excess of moisture. The paper or other substance operated on is then dried by artificial heat preferably, when the dampened spots 2 being thus dried cause the adjacent portions of the substance to form into permanent wrinkles, by shrinking the paper or other substance along or in proximity to these spots, and these wrinkles or raised and sunken surfaces, unlike indents formed by folding, crimping, corrugating, plaiting, or embossing remain absolutely permanent, and will not be obliterated by the

roughest usage. The ornamentation of paper and analogous substances may also be accomplished by operating on such substances in the process of their manufacture by drying the wet web as it leaves the rolls, in varying spots or lines and at different points, by passing the wet web over any surface having portions of its surface heated, or which presents to the wet web heated spots or points, and which dries the web at those spots or points only, leaving the intervening spaces to be dried afterward or by treating it in any other manner whereby the wet web is first dried in spots and at different points, and the intervening spaces afterward dried. The form of ornamentation may assume any configuration desired, such as lines running in any direction, stars, diamond-shaped figures, &c. Paper after its manufacture may also be dampened over its entire surface and the surface dried in lines or spots, and the balance of the surface afterward dried which will produce the same effect as the operations hereinbefore described.

I do not confine myself to any particular method of producing this article of manufacture, having described the above product simply so that those skilled in the art to which this invention appertains, may know how to make and produce the same.

Embossing, crimping, folding, plaiting and creasing paper, to form wrinkles, so called, in it, is old and I disclaim as to ornamentation produced in such manner, my method consisting in wetting and then simply shrinking the paper without otherwise artificially producing raised or sunken surfaces therein, and I make a distinction between all ornamentation produced by such embossing, crimping, folding, plaiting, or creasing or producing raised and sunken surfaces in paper by any artificial method, and producing permanent wrinkles by simply wetting and drying the paper or by drying wet paper in lines or spots, the two latter methods producing true wrinkles, while the other artificial methods of embossing, &c., do not produce wrinkles at all but produce creases and folds, or if wrinkles are produced in drying they are in company with such creases and folds which creasing and folding

I wish to eliminate, my wrinkles being produced by the natural shrinking of the material of the paper solely.

Having fully described my invention, what
5 I claim is—

As a new article of manufacture, paper or other fibrous or analogous material, having a portion of its surface wrinkled along or in

proximity to predetermined pattern lines or spots, substantially as herein described. 10

In testimony whereof I affix my signature in presence of two witnesses.

SETH WHEELER.

Witnesses:

E. J. WHEELER,

WM. A. WHEELER.

Correction in Letters Patent No. 496,964.

It is hereby certified that in Letters Patent No. 496,964, granted May 9, 1893, upon the application of Seth Wheeler, Albany, New York, for an improvement in "Ornamented Paper," an error appears in the printed specification requiring correction, as follows: In the heading the words "No specimens" should read *Specimens*; and that the Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 10th day of October, A. D. 1893.

[SEAL]

WM. H. SIMS,
First Assistant Secretary of the Interior.

Countersigned:

S. T. FISHER,
Acting Commissioner of Patents.