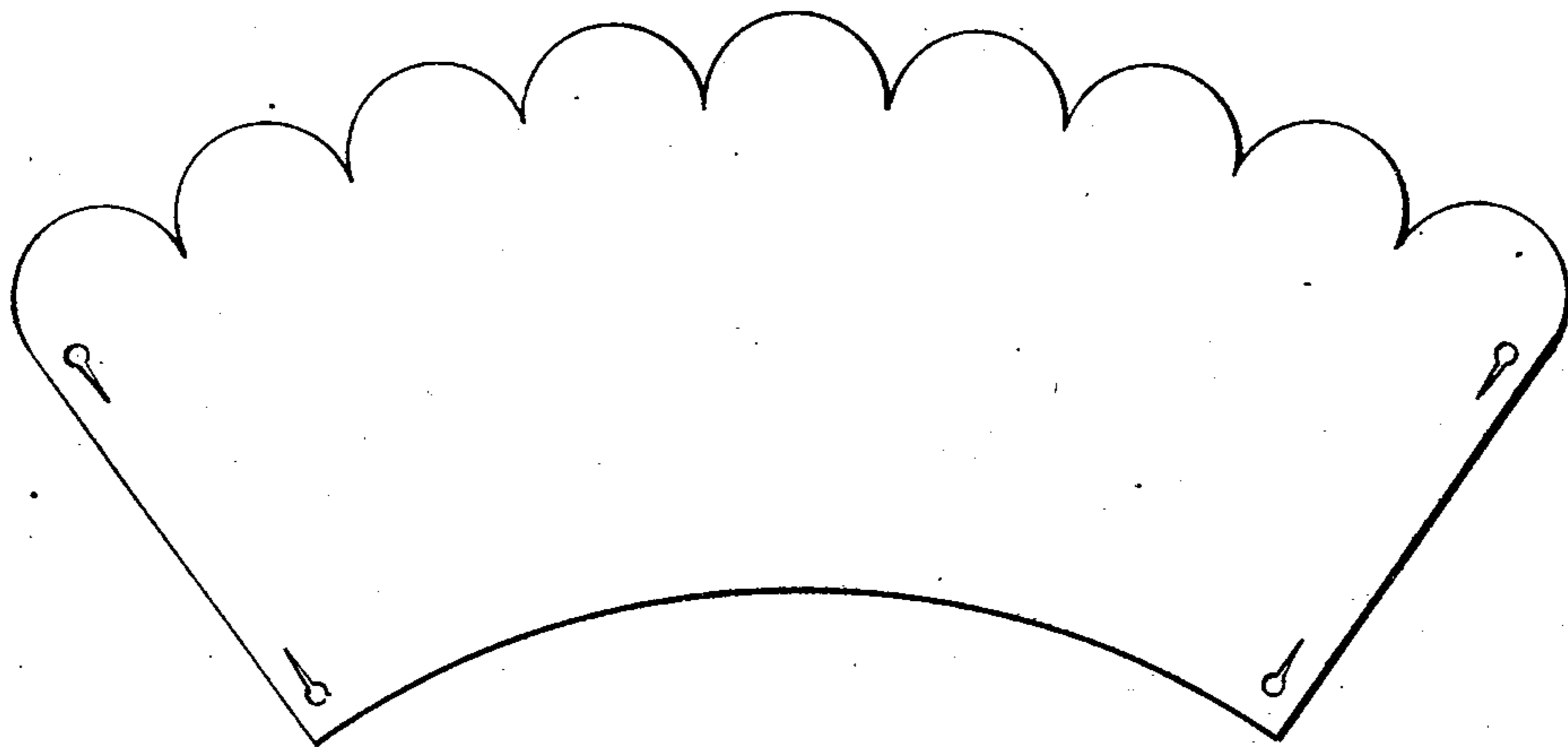


A. T. DENISON & E. P. FURLONG.
WEARING APPAREL MADE OF PAPER.

No. 60,488.

Patented Dec. 18, 1866.



Witnesses:
J. B. Kiddle.
M. W. Frothingham.

Inventors:
A. T. Denison
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Attys

United States Patent Office.

IMPROVEMENT IN WEARING APPAREL MADE OF PAPER.

A. T. DENISON, OF POLAND, AND E. P. FURLONG, OF PORTLAND, MAINE.

Letters Patent No. 60,488, dated December 18, 1866.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ADNA TRUE DENISON, of Poland, Androscoggin county, and EDWIN P. FURLONG, of Portland, Cumberland county, all in the State of Maine, have invented an improved Paper Wearing Apparel; and we do hereby declare that the following, taken in connection with the drawings, which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practise it.

In the manufacture of collars and similar articles of wearing apparel from paper, the practice is generally either to employ a smooth-surfaced paper from which to manufacture or to polish the articles after they are formed. Sometimes, however, the paper is embossed by dies to give to the dress surface a figured appearance, the figures being generally regular to imitate the surface of fabrics woven with patterns.

The object of our invention is the production of paper articles of wearing apparel, having an irregularly crinkled appearance, like dimity, crape, or crimpoline. For this purpose we employ paper formed into crinkles or flexures, in the paper-making machine, or while the paper is in a soft or pulpy or semi-pulpy condition, the surface of the paper being thereby not only irregularly crinkled in appearance, but the articles possessing an elasticity in the direction of their length, and a permanency as regards the crinkles, that cannot be produced by any method of embossing or crimping the paper after it is finished in the ordinary manner, or after it has been dried and calendered. Such paper is sometimes produced accidentally in the paper machine, by the sheet breaking as the blanket passes it through the press rolls, the end of the paper passing around with the roll, and bringing up against the doctor, and the progression of the paper forming it into these crinkles as it strikes the doctor, when it is customary to again reduce it to pulp in the vat. To produce the paper regularly or in quantity for manufacturing purposes, we recommend a somewhat similar process, with an arrangement of mechanism for receiving the paper at the doctor, and feeding it therefrom continuously, the same as it would be fed (if not crinkled) to the couch and calender rolls. After being crinkled, it may be passed through presser rolls, that shall give a *uniform* crinkled surface to the paper. The manner of producing such paper, however, forms no part of the invention intended to be herein covered; our present invention consisting in articles of wearing apparel as a new manufacture, made in whole or in part from paper crinkled while in a pulpy or semi-pulpy condition.

The drawing may be supposed to represent (so far as it is practical) a piece of crinkled goods to be formed into a collar, or into a pantalet, or other similar article, the crinkles being denoted by the cross-lines. Bosoms, collars, frills, pantalets, edgings, and all similar articles may be formed from this material, and besides possessing the dimity or crape appearance, will also possess a very desirable degree of elasticity. The articles may be formed from common paper, reduced to a semi-pulpy condition and then crinkled, but we do not consider that such production would result in so desirable an article of stock as that crinkled in the paper-making process.

We do not claim broadly making articles of apparel from paper, but we claim as our invention the new manufacture, consisting of articles of wearing apparel made in whole or in part from paper formed into crinkles or flexures while in a pulpy or semi-pulpy condition, substantially as set forth.

ADNA TRUE DENISON,
EDWARD P. FURLONG.

Witnesses:

F. GOULD,
S. B. KIDDER.