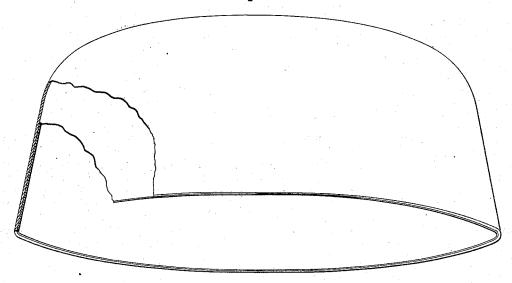
## F. G. HANSON. Tip-Lining for Hats.

No. 219,257.

Patented Sept. 2, 1879.

Fig. 1.

Fig. 2.



ATTEST:

Jerge B fooddard James J Boyan INVENTOR

## UNITED STATES PATENT OFFICE

FRANCIS G. HANSON, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN TIP-LININGS FOR HATS.

Specification forming part of Letters Patent No. 219,257, dated September 2, 1879; application filed July 18, 1879.

To all whom it may concern:

Be it known that I, FRANCIS G. HANSON, of the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Tip-Linings for Hats; and I declare the following to be a full, clear, and exact description of my invention, reference being had to the accompanying draw-

Hitherto tip-linings have been made in two or more pieces sewed together to fit the tip and sides of the crown of a hat, or, when made of one piece, are ironed into the hat. In both cases the linings are necessarily creased or folded by the operation.

The object of my invention is to produce a tip-lining which shall fit into the hat without showing a crease, fold, or seam, and which shall conform to the shape of the hat and retain its position when placed in the hat.

I first paste a buckram to the back of the satin or other material designed for the lining. This is then placed in a hat-shaped die. The dies-male and female-are heated, and moisture supplied in the ordinary way. Pressure is applied, and the material stamped out into the desired shape to fit the hat.

I prefer to use a buckram made of ordinary mosquito-netting well saturated with a solution of starch. This solution of starch assists in the stretching of the lining in the stamping operation and increases the glossiness of the outer material. In this way tip-linings can be made quicker and at less expense than hitherto.

In the drawings, Figure I is a plan view, showing the buckram and outer material together. Fig. II shows the tip-lining in its proper shape, but broken away to show the buckram at the upper and outer break, and the satin or other material at the lower break.

What I claim as new, and desire to secure

by Letters Patent, is—

1. Making tip-linings for hats by stiffening any material desired, and stamping the same into suitable form, substantially as described.

2. A tip-lining for a hat, made of stiffened material and without fold or crease, substantially as described.

F. G. HANSON.

Witnesses:

GEORGE B. STODDART, JAMES J. BOGAN.