

A. STARR & H. A. WHITING.
HAT BINDING.

No. 180,954.

Patented Aug. 8, 1876.

Fig. 1.

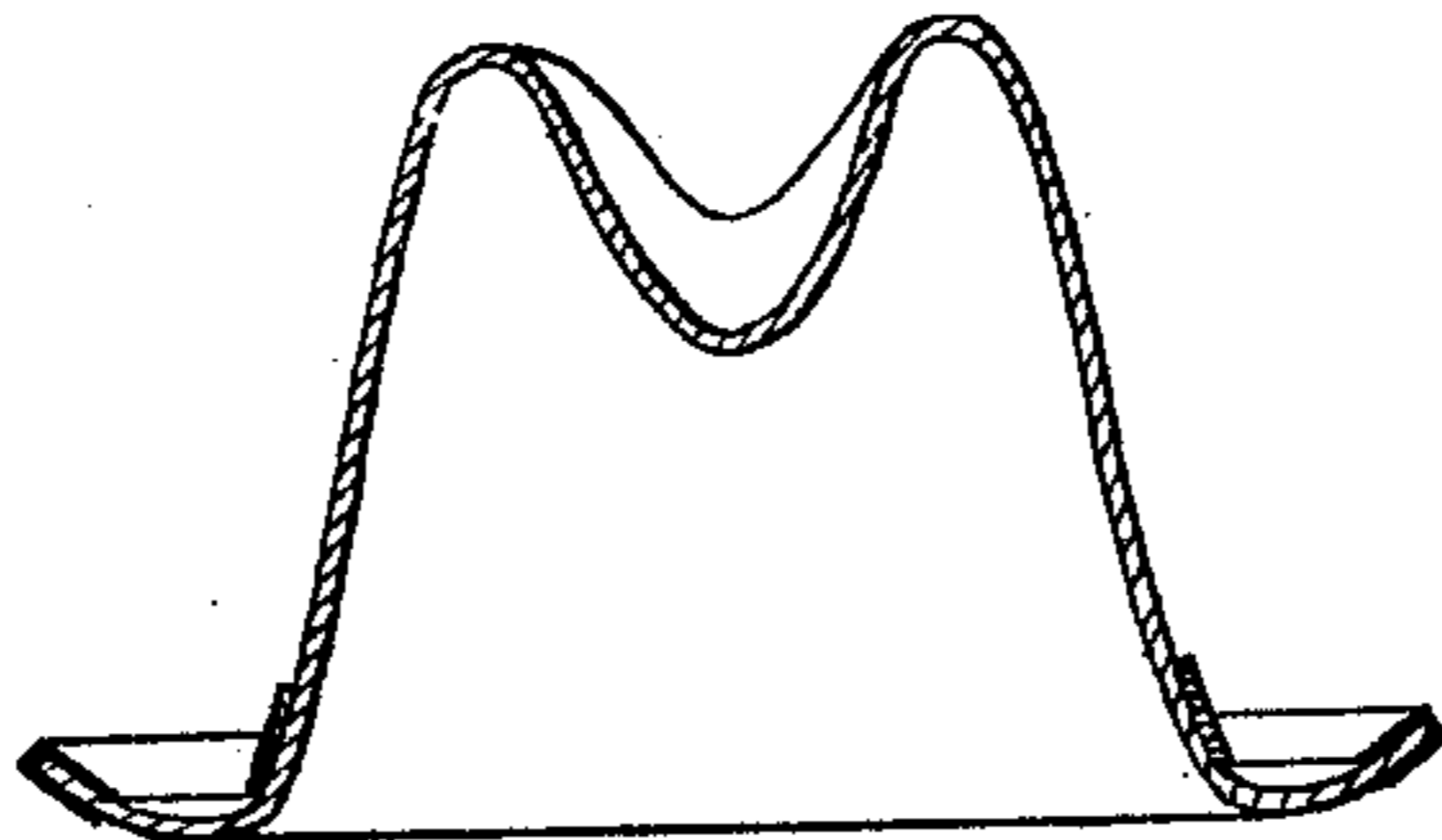


Fig. 2.



Fig. 3.



Witnesses.

Otto Aufeland
Chas. Wahlen

Inventors.

Alfred Starr
Henry A. Whiting

per
Van Santvoord & Hauff
Attors

UNITED STATES PATENT OFFICE

ALFRED STARR AND HENRY A. WHITING, OF MOUNT VERNON, N. Y.

IMPROVEMENT IN HAT-BINDINGS.

Specification forming part of Letters Patent No. 180,954, dated August 8, 1876; application filed November 10, 1875.

To all whom it may concern:

Be it known that we, ALFRED STARR and HENRY A. WHITING, both of Mount Vernon, in the county of Westchester and State of New York, have invented a new and Improved Adhesive Binding for Hats, Garments, and other articles, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a cross-section of a felt or soft hat to which our binding has been applied. Fig. 2 represents a piece of binding prepared according to our invention, having the adhesive material applied upon its entire width. Fig. 3 is a piece of binding having the adhesive material applied along its edges, leaving the middle part uncoated.

This invention relates to fabrics commonly known as tape or binding, one of the uses of which is to bind the edges of hats, caps, and various garments. Heretofore such binding, whether of cotton, silk, or other material, has been secured to the hat or other article by sewing its edges fast thereto. This method of securing the binding involves much labor, and in the case of articles of irregular form or of rigid character is a work of more or less difficulty.

Our invention enables us to secure tape or binding to any article which is to be bound therewith without the labor and trouble of sewing it thereto; and it consists in combining with tape or binding, or other similar articles, an adhesive material, which we apply to the inner surface of the binding material, and which adheres thereto, so that after being applied thereto the binding is ready for use, and can be packed and transported and sold like ordinary binding.

The adhesive material which we use for our purpose consists of gutta-percha, in a pure or raw state, and gum-shellac, or its equivalent, of which materials we take seven parts, by weight, of the gutta-percha, and one part of the gum-shellac. The shellac must be dry, and in a pulverized state. These ingredients are mixed by grinding, in the usual mode of grinding gutta-percha, by the use of heated rolls, or in any other suitable manner, and after they have been thoroughly ground

and mixed the composition is applied to the surface of the fabric by means of hot calendering-rolls, through which the fabric, with the adhesive material placed thereon, is passed, the rolls serving to spread the same in a thin layer upon the fabric. The adhesive material is applied either to the whole surface of the fabric, as shown in Fig. 2, or to part thereof, or along its edges, as is shown in Fig. 3.

If it is desired to make the composition more pliable, a portion of raw india-rubber can be combined therewith.

Tape or binding thus prepared can be secured to the edges of stiff and soft hats, caps, and garments of various kinds by means of heat and pressure—as, for example, by means of the apparatus described in Henry A. Whiting's Patent Reissue No. 6,047.

The adhesive material renders the fabric both adhesive and water-proof, and, consequently, hats and other articles to which it is applied can be exposed to rain without danger that the binding will become detached from the effects of moisture.

Tape or binding can be prepared in this manner for use on any article where tape or binding material is now used, and can be transported and exposed for sale without injury or deterioration, provided it is not exposed to too great a degree of heat, so as to melt or soften it.

The heat to be used in applying our adhesive binding to any article must be sufficient to soften the adhesive material, so that it will become sticky and adhere to the article to which the binding is applied.

What we claim as new, and desire to secure by Letters Patent, is—

A binding for hats and other articles, coated on one side with a composition of gutta-percha, or gutta-percha and india-rubber, and gum-shellac, to render the binding adhesive and water-proof, substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands and seals.

ALFRED STARR. [L. S.]

HENRY A. WHITING. [L. S.]

Witnesses:

J. VAN SANTVOORD,
E. F. KASTENHUBER.