

UNITED STATES PATENT OFFICE.

JEHIEL MUNSON, OF BURLINGTON, VERMONT.

COMPOSITION FOR PASTE FOR ATTACHING THE COVERINGS TO PIANO-FORTE HAMMERS.

Specification forming part of Letters Patent No. **28,768**, dated June 19, 1830.

To all whom it may concern:

Be it known that I, JEHIEL MUNSON, of Burlington, in the county of Chittenden and State of Vermont, have invented a new and useful Composition or Paste for Securing Leather Coverings upon the Face of Piano-Forte Hammers, the object and composition of which are truly and justly set forth, explained, and described as follows:

In order to secure softness of tone in pianos, it is usual to glue over the striking end or face of the hammer a piece of felt, and this is covered with leather in most instruments, in order to protect the felt from being cut by the strings. The leather is brought over the felt, and the ends are fastened by glue to the sides of the hammer-head. It is not glued to the felt on the end or face of the hammer, because the glue, when cold, would form a stiff coat over the felt, which would not yield to the string. The benefit of the felt would be entirely lost in consequence, and the sound would be no better than if the string were struck with wood covered with a similar coat of leather. On the other hand, the leather, being confined only at the ends, is apt to become loose over the face of the hammer, and the sound suffers in a very different way, being much as if the string were struck with a loose leather bag. To obviate this difficulty I pre-

pare an adhesive paste, with which the leather covering may be attached to the felt over the entire face of the hammer, and which remains perfectly flexible, offers no sensible resistance to the string, and in no way impairs the action of the felt; but the tone remains as soft as if the string were struck by the felt alone. This paste or composition is prepared by mixing six ounces of wheat-flour, two ounces of isinglass, one ounce of gum-arabic, and half an ounce of common glue. They are to be dissolved in water sufficient to make a stiff paste, and to be soaked in the water long enough to effect a perfect solution of the materials, and then scalded.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. The composition, from the materials and in the manner above described, of an adhesive composition or paste.
2. The application of such paste for the purpose of attaching, to the whole face of the felt with which piano-forte hammers are usually covered, the leather by which they are protected from the action of the strings.

JEHIEL MUNSON.

Witnesses:

S. H. HODGE,
T. E. WALES.