

# UNITED STATES PATENT OFFICE.

WILLIAM H. TOWERS, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN MATERIALS FOR FILLING MATTRESSES, CUSHIONS, AND OTHER ARTICLES OF UPHOLSTERY.

Specification forming part of Letters Patent No. 117,018, dated July 11, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM H. TOWERS, of Boston, in the county of Suffolk and State of Massachusetts, have made a new and useful Improvement in Material for Filling Mattresses, Beds, Cushions, and other articles of upholstery; and I hereby declare the following to be a full and exact description of the same.

This invention consists in preparing paper-pulp so as to be light, spongy, and elastic, so that it may be used as material for filling mattresses, beds, cushions, and other articles for which hair, grass, husks, feathers, cotton, wool, and the like, are now used.

The following description will enable any one to make and use my invention:

I take paper-pulp, half-stuff, disintegrated straw, wood, grass, rags, or other equivalent pulp, such as used for paper, and thoroughly dry. This generally leaves it in either thick sheets or lumps. These sheets or lumps are put into a beater-wallowing machine or other equivalent apparatus, and beaten so as to separate the fibers of the pulp as much as possible. This process produces an article resembling down or fine cotton, and may then be applied in the same manner for stuffing mattresses, pillow-cushions, and other articles, in the ordinary manner well known to upholsterers. To keep the material from absorbing water it may be impregnated with any suitable water-proofing composition, such as paraffine in

solution. This should, by preference, be applied during the process of preparing and disintegrating the sheets or lumps. To keep the fibers elastic they may have a sprinkling of glycerine applied to them. The pulp may be dried by first using the hydro-extractor or centrifugal machine, and then drying in a warm room over or in the common feather-renovator, which may be heated by steam, hot-air, or other suitable means. The mattress or other article can be further improved by water-proofing the fabric used for the tick, covering, or case.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The material, herein described, for filling mattresses, beds, cushions, and other articles.
2. The new articles of manufacture produced from the material herein described.
3. The process herein described for treating fibrous pulp, the same consisting in drying and disintegrating so as to produce a soft, spongy, and elastic material, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. H. TOWERS.

Witnesses:

HENRY C. EGGLESTON,  
JOHN J. GARDNER.