

No. 727,146.

PATENTED MAY 5, 1903.

R. W. JOHNSON.  
SUBSTITUTE MATERIAL FOR GAUZE.  
APPLICATION FILED JAN. 29, 1903.

NO MODEL.

Fig. 1.

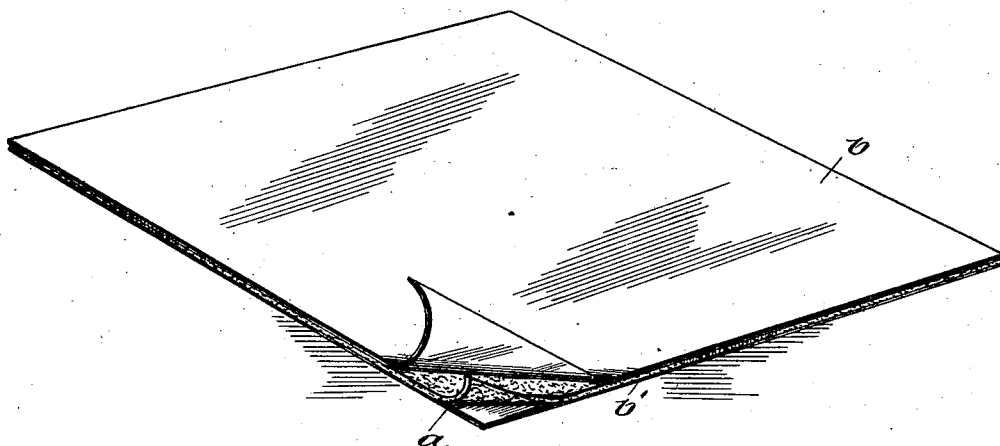


Fig. 2.

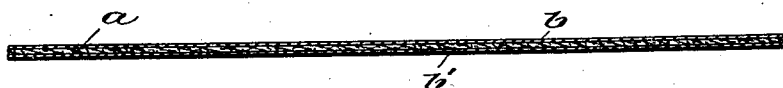
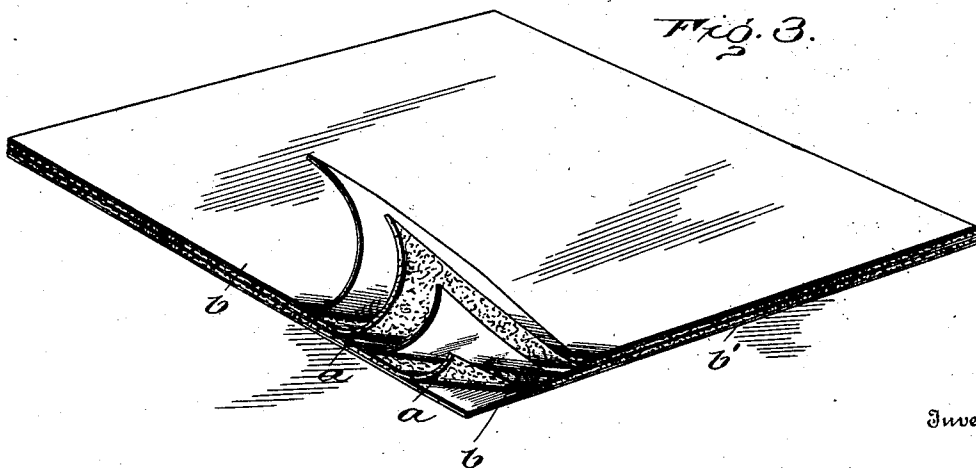


Fig. 3.



Inventor

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Witnesses

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## UNITED STATES PATENT OFFICE.

ROBERT W. JOHNSON, OF NEW BRUNSWICK, NEW JERSEY.

## SUBSTITUTE MATERIAL FOR GAUZE.

SPECIFICATION forming part of Letters Patent No. 727,146, dated May 5, 1903.

Application filed January 29, 1903. Serial No. 140,992. (No specimens.)

*To all whom it may concern:*

Be it known that I, ROBERT W. JOHNSON, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Substitute Material for Gauze, of which the following is a specification.

The object of my present invention is to provide a neat, efficient, and inexpensive material which shall be adapted to all the needs and purposes for which gauze is now used by dentists, physicians, surgeons, and others.

Stated in general terms, my invention embodies a material or structure consisting of a compound cellulose fiber, sheeted.

My invention further consists in a process of making said material.

The nature, characteristic features, and scope of the invention will be more readily understood by reference to the accompanying drawings, forming a part hereof, wherein—

Figures 1 and 3 are perspective views of a material embodying features of my invention, and Fig. 2 is a transverse sectional view of the same.

Referring to said drawings, *a* represents a thin sheet, web, or ply of cotton, and *b b'* are coincident plies or sheets of very thin tissue-paper, which act to sustain and carry the cotton between them. The material may consist of one ply of absorbent cotton faced on both sides with paper, as shown in Figs. 1 and 2, or, as shown in Fig. 3, it may consist of several separate plies of cotton and the prerequisite number of sheets of paper.

In carrying out the process of my invention the paper in conjunction with the cotton, arranged as above explained, is moistened and then pressed by running it through a pair of rollers. In some instances a slight amount of starch or other sizing material may

be added in very minute proportions for the purpose of making the sheets adhere together; but generally if dampened properly and dried carefully the moisture, together with the cotton, causes the component parts of the fabric to adhere sufficiently to produce a soft flexible material. The final result is a cheaper, better, and far more absorptive material than gauze, and the paper facings cover the cotton fibers, so that they do not get into the wound when used as a wound-dressing.

The material may be cut into the form of napkins or handkerchiefs for dentists, and in order to give the napkins a nice appearance the pressing-rolls may be embossed. The material is, however, valuable in other instances—for example, wound-dressing in surgery and for other kindred purposes.

It will be obvious to those skilled in the art to which the invention appertains that modifications may be made in details without departing from the spirit and scope of the invention. Hence I do not limit myself to the precise mode of procedure hereinabove pointed out; but,

Having described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The process of making a substitute material for gauze, which consists in forming a compound fabric of alternate thin sheets of paper and cotton, applying a sizing material, and subjecting the fabric to exerted pressure.

2. A substitute material for gauze, consisting of a compound fabric of alternate thin sheets of sized tissue-paper and cotton, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT W. JOHNSON.

Witnesses:

JNO. L. CARBERRY,  
R. C. KENYON.