

No. 755,137.

PATENTED MAR. 22, 1904.

H. H. JUDSON.
NON-CONDUCTING WALL.
APPLICATION FILED JAN. 18, 1904.

NO MODEL.

Fig. 1.

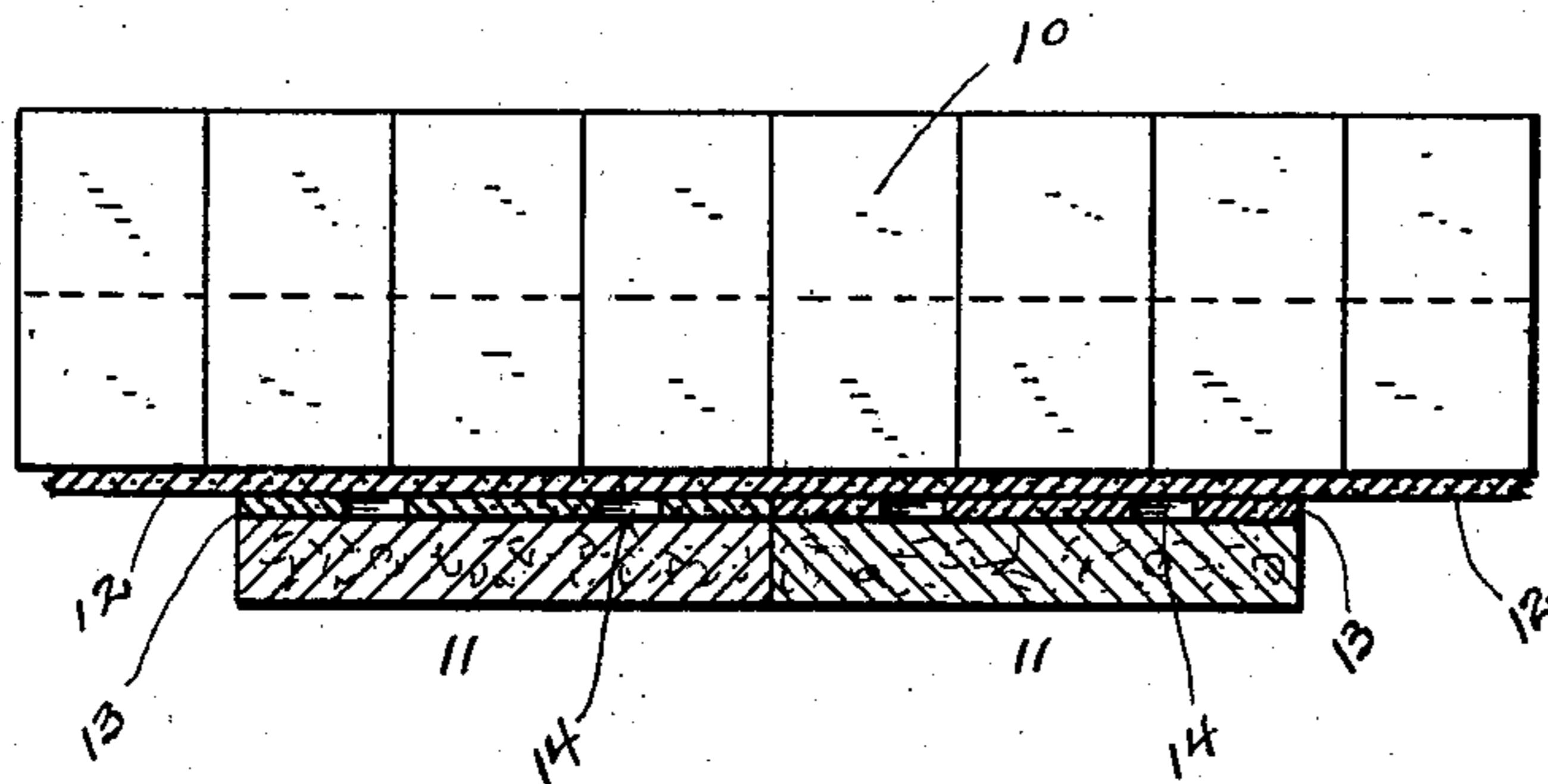
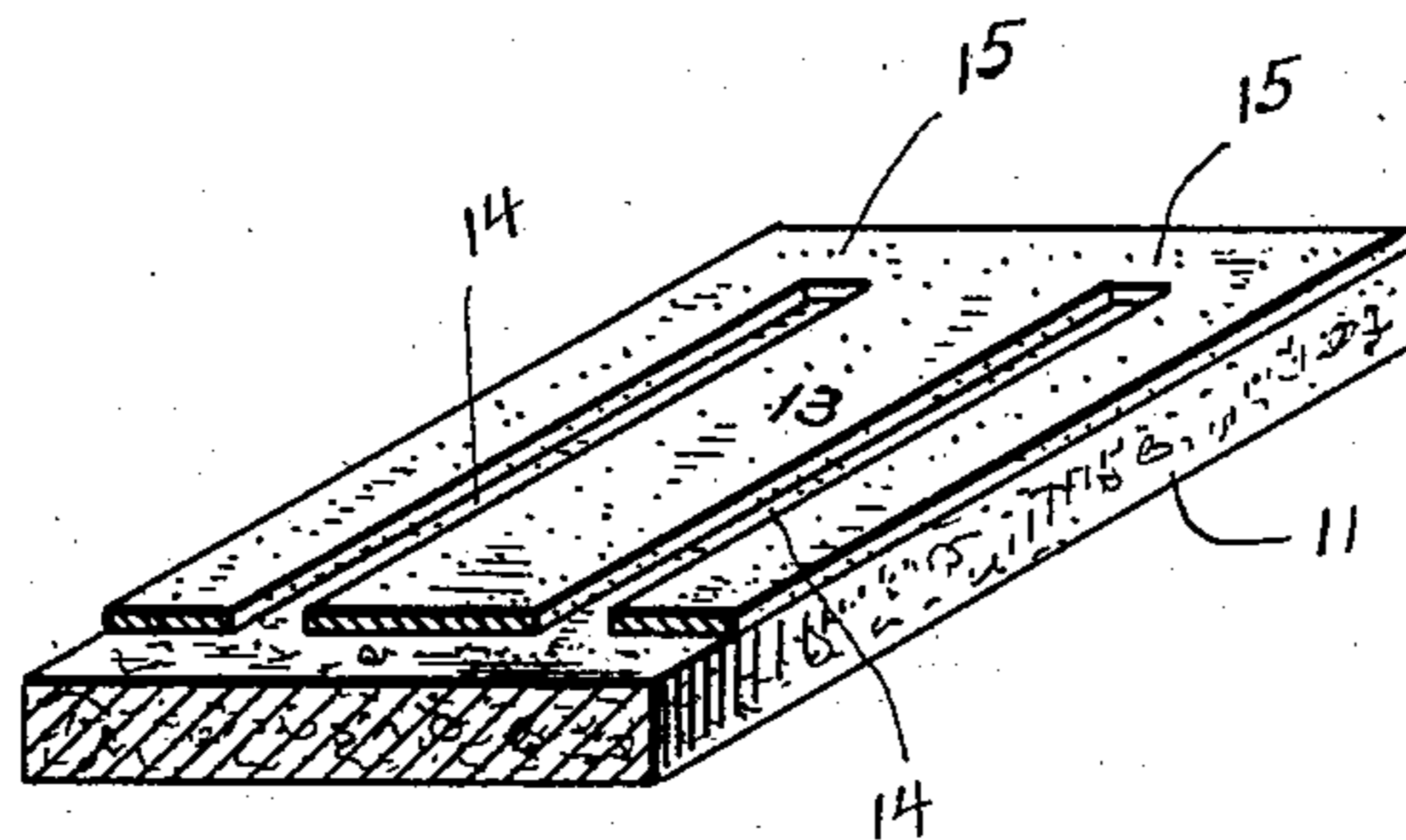


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

HORACE H. JUDSON, OF STRATFORD, CONNECTICUT, ASSIGNOR TO THE
NONPAREIL CORK MANUFACTURING COMPANY, OF NEW YORK, N. Y.,
A CORPORATION.

NON-CONDUCTING WALL.

SPECIFICATION forming part of Letters Patent No. 755,137, dated March 22, 1904.

Application filed January 18, 1904. Serial No. 189,439. (No model.)

To all whom it may concern:

Be it known that I, HORACE H. JUDSON, a citizen of the United States, residing at Stratford, county of Fairfield, State of Connecticut, have invented a new and useful Non-Conducting Wall, of which the following is a specification.

My invention has for its object to produce a non-conducting wall adapted for use in the construction of cold-storage warehouses and refrigerating vaults, apartments, &c., as in breweries, hotels, steamships, &c., which shall be equal in non-conducting qualities to the best walls heretofore produced, shall be thoroughly durable, proof against dampness, easy to construct, and relatively inexpensive to build, a saving of approximately one-half in the cost of construction being made through dispensing with furring-strips and nails and reduction in the amount of time required to construct the wall.

In order to accomplish the desired results, I have devised the novel non-conducting wall and method of making the same, of which the following description, in connection with the accompanying drawings, is a specification, reference characters being used to indicate the several parts.

Figure 1 is a horizontal section of a piece of my novel non-conducting wall, and Fig. 2 is a detail perspective illustrating the method of preparing the strips of cork for attachment.

The method of making my novel wall is as follows: The foundation is brickwork, which I have indicated by 10, and the outer layer is cork, which I have indicated by 11. For this purpose I preferably use the well-known nonpareil cork, which is ordinarily furnished in strips thirty-six inches long by twelve inches wide and two or three inches in thickness, although the size or thickness of the strips has nothing to do with the principle of the invention. After the cork strips are in place they may be painted or finished in any ordinary or preferred manner. Heretofore the usual way of attaching the strips of cork in place has been to attach furring-strips to

the brickwork and then nail the strips of cork to the furring-strips. This method of making the wall has necessitated painting over the brickwork with asphaltum paint in order to keep out dampness. The asphaltum of the wall, the putting up of the furring-strips, and the nailing of the strips of cork thereto has taken so much time and added so much to the cost of construction as to constitute an important factor in contracting. It should, furthermore, be noted as an important feature of my novel wall that the use of nails is wholly avoided, their use having been found objectionable, as moisture will follow them through the cork.

In carrying out my novel method the strips of cork are held in place by the suction of fresh cement and the formation of dead-air spaces between the cork and the brickwork. The face of the brickwork is covered over with a layer of fresh cement, which I have indicated by 12. The strips of cork are each independently covered with a layer of fresh cement, which I have indicated by 13. Having laid the cement evenly upon the strips of cork, the operator in any suitable manner, as by means of a scraper, produces longitudinal channels, which I have indicated by 14, in the cement upon the strips of cork. These channels do not in practice extend quite from end to end of the strips of cork. I leave one or, if preferred, more cross-walls of cement. These channels formed in the cement on the strips of cork comprise the dead-air spaces of the completed wall. The number of channels and the width of the channels and the number of the cross-walls upon each strip of cork are wholly immaterial so far as the principle of the invention is concerned. It is of course essential that the strips of cork be firmly secured in place, so as to avoid the possibility of their becoming separated in use. After insuring the firm attachment of the strips of cork it is desirable that the amount of air-space be as large as possible, and, finally, it is necessary that the air-space be divided into separate spaces in order to prevent circulation of air therein and make of them, in

fact, dead-air spaces. Having prepared the wall with a layer of cement and prepared strips of cork with layers of cement having channels and cross-walls therein, the operator applies the strips of cork singly to the cemented face of the wall by slapping each strip quickly in place, so that a suction is formed which causes the strips of cork to remain firmly in place while the two layers of cement are fresh, it being of course obvious that as soon as the cement sets it will itself hold the strips of cork rigidly in place. An essential feature of my novel method, however, is that while the cement is fresh the strips of cork are held in place by suction.

Having thus described my invention, I claim—

1. A non-conducting wall comprising a layer of brickwork, a layer of cement laid thereon, an outer layer of cork and a layer of cement applied to the cork and having channels formed therein, the two layers of cement being placed in contact whereby the layer of cork is retained in place.

2. A non-conducting wall comprising a layer of brickwork, a layer of cement laid thereon,

an outer layer of cork in strips, and a layer of cement applied to the strips of cork, the layer of cement upon the cork having channels and cross-walls formed therein, and the two layers of cement being placed in contact, whereby the strips of cork are retained in place and dead-air spaces are formed between the cork and the brick wall.

3. The method of making non-conducting walls which consists in applying a layer of cement to a brick wall, applying a layer of cement to strips of cork, forming longitudinal channels and cross-walls in the layer of cement upon the strips of cork and then applying the strips of cork to the face of the wall with the layers of cement in contact, so that suction is produced whereby the strips of cork are held in place and dead-air spaces are formed between the cork and the brickwork.

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

HORACE H. JUDSON.

Witnesses:

A. M. WOOSTER,
S. W. ATHERTON.