

No. 680.445.

Patented Aug. 13, 1901.

J. H. STONE.
CORK INSULATING STRIP.
(Application filed Mar. 15, 1901.)

(No Model.)

Fig. 1.

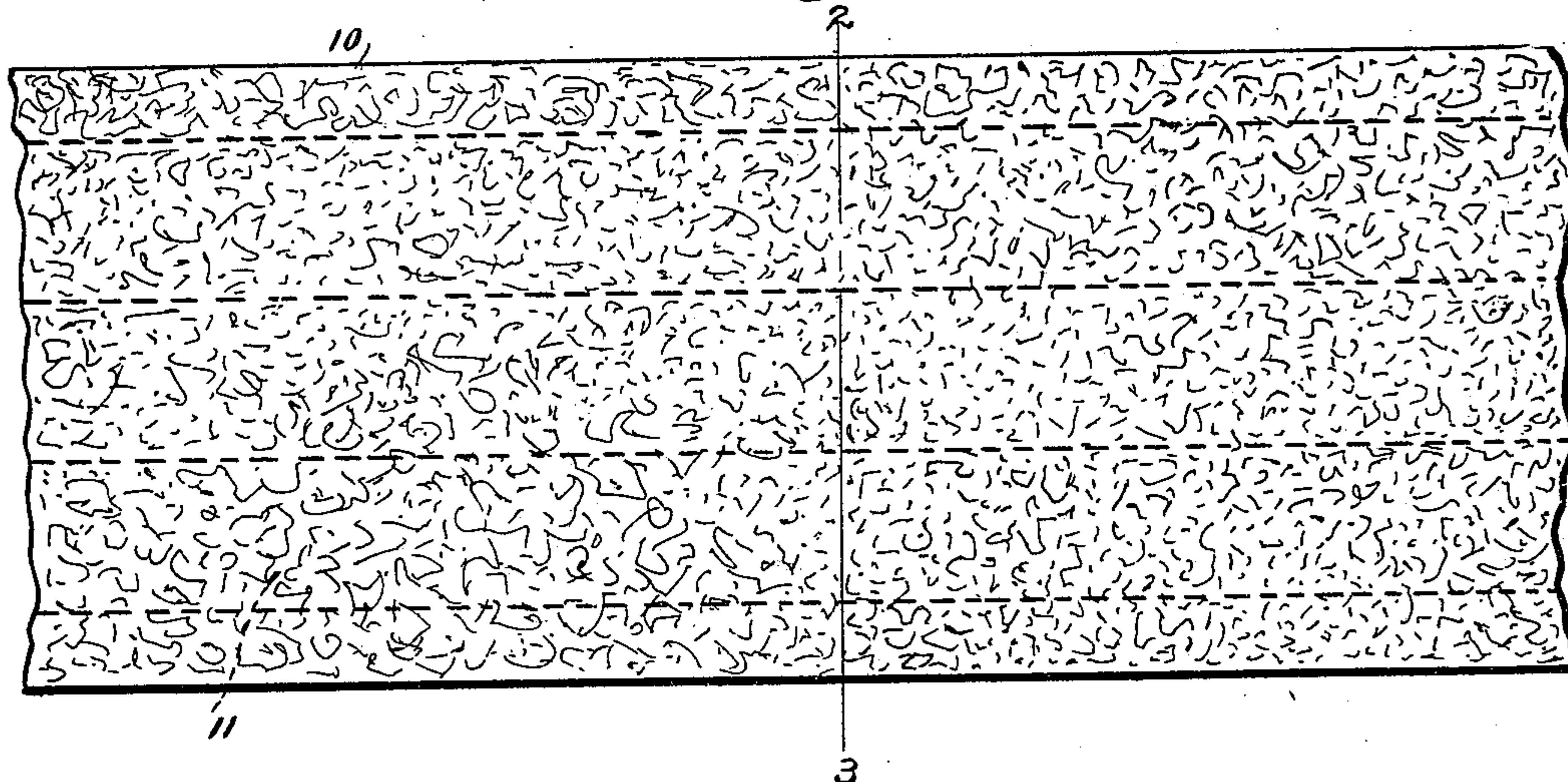
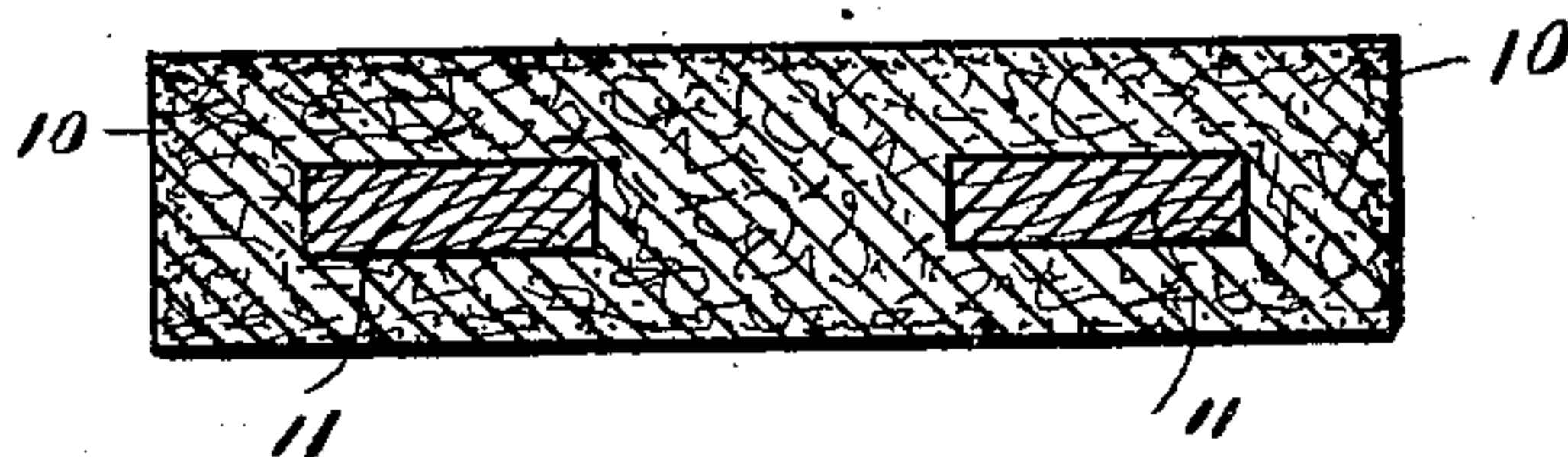


Fig. 2.



WITNESSES.

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JUNIUS H. STONE, OF BRIDGEPORT, CONNECTICUT.

CORK INSULATING-STRIP.

SPECIFICATION forming part of Letters Patent No. 680,445, dated August 13, 1901.

Application filed March 15, 1901. Serial No. 51,330. (No model.)

To all whom it may concern:

Be it known that I, JUNIUS H. STONE, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Cork Insulating-Strip, of which the following is a specification.

My invention relates to the class of insulating-strips used in house construction to deaden walls and in the construction of cold-storage rooms, ice-boxes, refrigerators, &c., for non-conducting purposes, and which may also be used for boiler-coverings, more especially to non-conducting strips made under patents to J. T. Smith, No. 456,068, dated July 14, 1891, and No. 484,345, dated October 11, 1902—that is, the class of insulating-strips in which a mass of dry granulated cork three times, more or less, the thickness of the finished strip is compressed to the desired shape under enormous pressure and is baked while compressed, the heat of the baking operation acting to distil a gum from the cork itself that cements the granulations into a solid mass, which is extremely durable and is not affected to the slightest extent by ordinary changes of temperature or by relative dryness or humidity of the atmosphere. In use strips of granulated cork formed in this manner are laid close together and ordinarily cemented to each other and secured to a backing. It should be understood, however, that my invention presently to be described is not limited to insulating-strips made in the manner above described, but is equally applicable to insulating-strips made by causing granulations of cork to adhere to each other otherwise than by the Smith process.

My invention has for its object to provide insulating-strips suitably stiffened by means of inclosed strips, so that the insulating-strips themselves will be greatly strengthened and may be handled more conveniently, and, most important of all, so that they may be nailed directly to studding, rafters, girders, &c., without the use of any backing whatever, thereby producing a much stronger and equally effective construction at a greatly-reduced cost, owing to the fact that backing is dispensed with and that each insulating-strip may be nailed independently in place without strain upon the body of the strip, the

strain of the nails being taken up not by the insulating-strips themselves, but by the inclosed strips through which they are driven. With this end in view I provide granulated cork insulating-strips having inclosed therein one or more longitudinal strips extending from end to end of the insulating-strip. A common size of insulating-strips is thirty-six inches long by twelve inches wide and from two to three inches thick. Within insulating-strips of this size I inclose by molding therein under pressure one or more, preferably two, longitudinal strips. This number will be found quite sufficient in practice, it being understood, however, that the size of the insulating-strip and the size and number of the inclosed strips is a matter that must be left entirely to the manufacturer, and may be varied to suit the requirements of special uses to which the insulating-strips are to be placed. The inclosed strips are of wood, which may resemble ordinary laths, but preferably are made heavier than ordinary laths—for example, two and one-half to three inches in width, one-half to one inch thick, and preferably the full length of the insulating-strips.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of one of my novel insulating-strips; Fig. 2, a cross-section thereof, illustrating the use of wood-inclosed strips.

10 denotes the insulating-strip, and 11 the inclosed strips of wood, which may be of any preferred shape in cross-section.

In use the insulating-strips are placed side by side and may or may not be cemented to each other. They are attached in place to rafters, studding, or girders, as may be desired, by driving nails through the inclosed strips and into the rafters, girders, or studding, it being obvious that the entire strain of the nails will be upon the inclosed strips and not upon the body of the insulating-strips, and that since the nails cannot pull out of the wood strips or the said wood strips pull off from the driven nails the insulating-strips as a whole will be held firmly in place in spite of the fact that the main body of the insulating-strips is composed of granulated material of an elastic nature.

Owing to the fact that the insulating-strip

contains no mineral substance it is well adapted for sound-deadening purposes, as above described, for it is obvious that purely vegetable material acts less to conduct sound
5 than mineral substances, and, furthermore, the granulated vegetable material (cork) may be readily compressed under the heavy pressure hereinbefore mentioned and at the same time pressed firmly against and around the
10 embedded wood strips, so as to leave no such air-spaces as would result from a simple molding operation of material, such as plaster. The inclosed strips of wood take and hold the
15 in place and so distribute the holding effect of said nails that the latter can have no tendency to crumble or disintegrate the granulated cork. The nails when being driven pass

readily through the cork without crumbling it, as happens when they are being driven 20 through plaster and similar mineral compositions.

Having thus described my invention, I claim—

An insulating-strip composed solely of 25 granulated vegetable material and a stiffening and attaching and nailing strip of wood inclosed therein, the granulated material being molded and compressed about and against the stiffening-strip. 30

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

JUNIUS H. STONE.

Witnesses:

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