(No Model.)

J. R. BALDWIN.

FLOORING BOARD.

No. 329,616. Patented Nov. 3, 1885.

Fig. 1

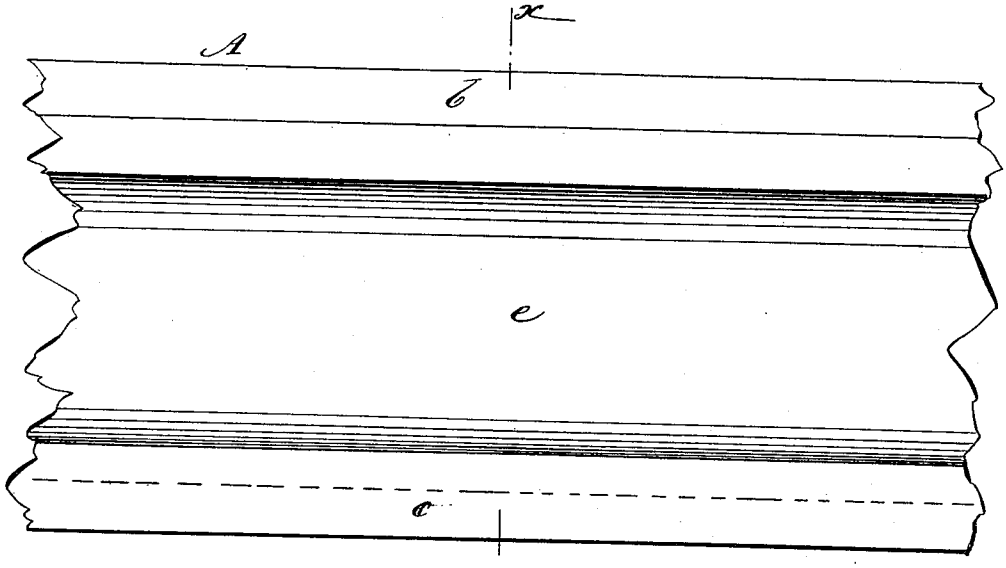


Fig. 2

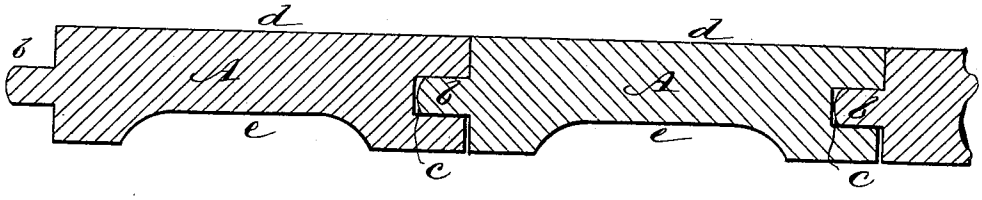


Fig. 3

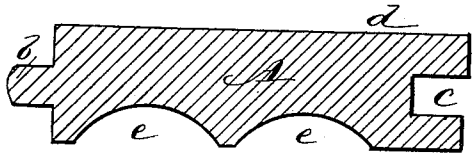
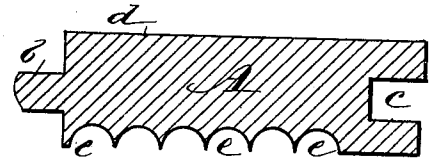


Fig. 4



WITNESSES:

C. Neveux

Jno. Mathew Ritter

INVENTOR:

J. R. Baldwin

BY Munn & Co

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN R. BALDWIN, OF MONTGOMERY, ALABAMA.

FLOORING-BOARD.

SPECIFICATION forming part of Letters Patent No. 329,616, dated November 3, 1885.

Application filed August 1, 1885. Serial No. 173,234. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. BALDWIN, of Montgomery, in the county of Montgomery and State of Alabama, have invented a new and useful Improvement in Flooring-Boards, of which the following is a full, clear, and exact description.

In the construction of flooring-boards it is usual to plane or dress the upper face of each board and to run the tongue and groove in its edges, leaving the under face of the board rough or undressed. The boards before being thus prepared for use—that is, as or after they are cut from the log—are seasoned, either in the air or artificially in a kiln; but no matter how dry when worked, if a fresh surface is exposed, as in dressing the exposed or upper surface of the boards, some shrinkage will take place, and this taking place along the freshly-planed surface only will warp the board, causing it to become concave, instead of perfectly flat, as it would if remaining in the condition in which it left the planing-machine. To obviate this is one of the objects of the within-described invention, but only one of the objects, as will be hereinafter described, and the invention essentially differs from another invention having such particular object only in view, and which consists in cutting one or more kerfs or slits in the under sides of the boards to prevent warping. The invention, however, which is the subject of this specification consists in a flooring-board which has both its under side and upper side dressed before using, to produce a counteracting shrinkage on both sides, and with its under side dressed to give it a concave form, and so that it will present about the same amount of fresh surface as the upper dressed side or face does, thus producing a compensating effect which will effectually prevent warping. Furthermore, the concave construction of the boards on their under sides throughout their length serves to establish air-spaces beneath the boards when the flooring is laid, whether upon ready-laid flooring or as a new flooring, across the joists of the building. These air-spaces will assist in preventing dry-rot in the boards, and in case of double floors will make such floors cooler in summer and warmer in winter, by reason of the non-conducting property of the air imprisoned within or passing between the floors, as provided for in the construction of the building. Again, the concave construction of the under sides of the boards adds materially to the lightness of the flooring without detracting from its strength, and the increased lightness of the boards will be a source of economy both in freight and in handling them.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents an under side view of a piece of dressed flooring-board made in accordance with the invention; and Fig. 2, a transverse section, as indicated by the line *x x* in Fig. 1, of a series of such boards as matched or fitted together. Figs. 3 and 4 are transverse sections showing modified constructions of the improved flooring-board.

Referring, in the first instance, to Figs. 1 and 2 of the drawings, A indicates the flooring board or boards, having a tongue, *b*, on their one longitudinal edge, and a groove, *c*, in their opposite longitudinal edge. Each of said boards before being used is not only planed or dressed on its upper side or face, *d*, but also on its under side, which latter is gouged or planed concave throughout the length of the board, so that it not only presents about the same amount of dressed surface as the upper side, thereby having a compensating effect as regards shrinkage, due to the fresh dressing of the board, but providing for an air-space beneath the boards when laid as flooring, as and for the purposes hereinbefore set forth, as well as securing increased lightness; and these advantages are best attained by dressing the under side of the board with a single concave or flat arch-shape groove, *e*, extending in its transverse section nearly across the whole width of the board throughout its length, as shown in Figs. 1 and 2, as such shaped single recess or groove, while maintaining the strength of the board, will secure the freest passage for air beneath or within it. If desired, however, the under side of the board may be dressed with two or more longitudinal recesses or grooves, *e*, having an aggregate area corresponding, or nearly so, to that of the upper flat dressed side or face of the board, as shown in Figs. 3 and 4.

These flooring-boards may also be used for the inner walls or surfaces and ceilings of buildings or apartments.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—.

1. A flooring-board having one or more longitudinal concave-shaped recesses in its under side of approximately the same area as the area of its upper side, substantially as and for the purposes herein set forth.

2. The flooring-board A, having in its under side a longitudinal concave or arch shaped groove, *e*, extending nearly wholly across it, essentially as and for the purposes described.

JOHN R. BALDWIN.

Witnesses:
JOSEPH W. GUE,
JOS. P. LEE.