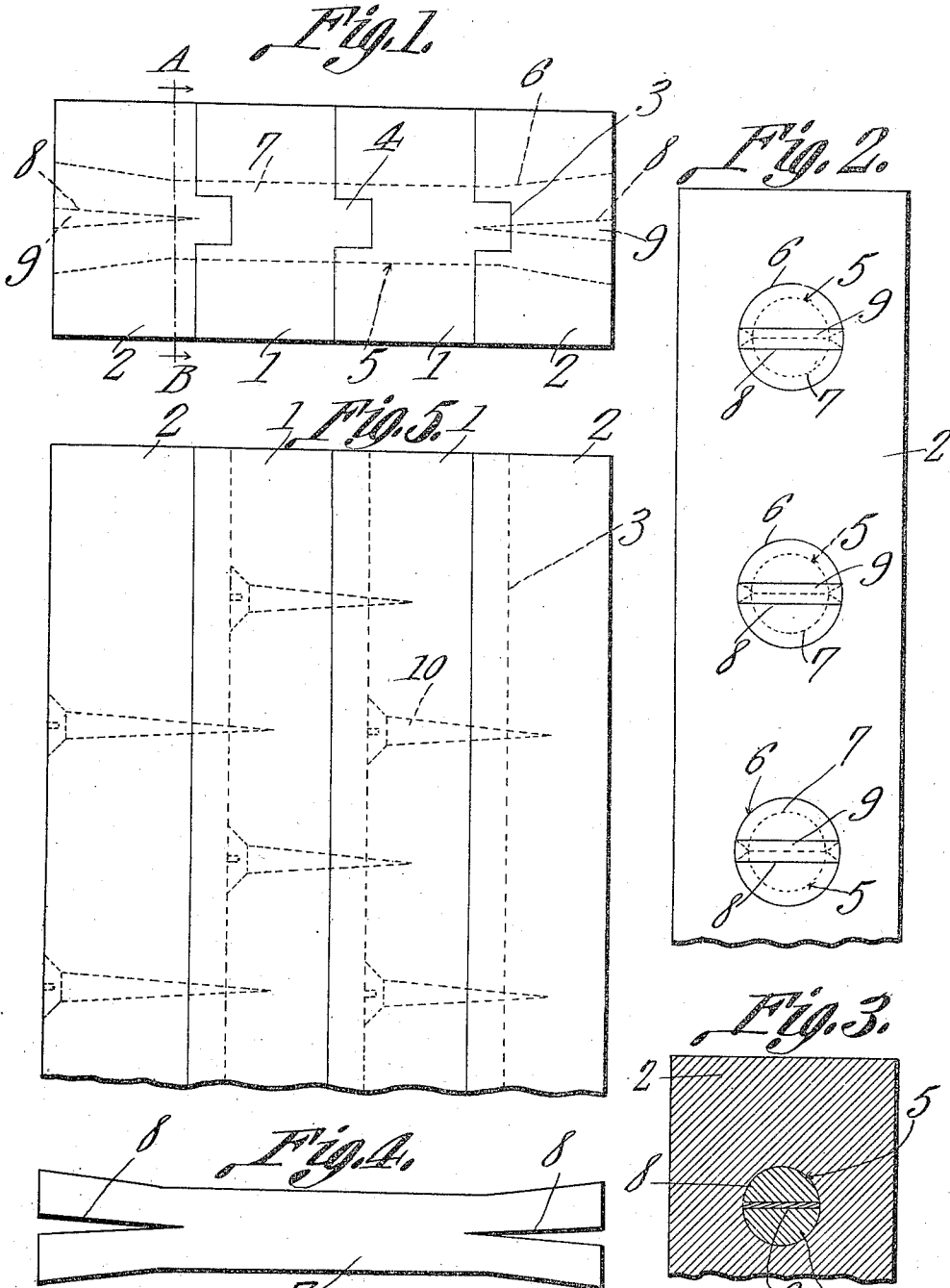


C. J. DALLEY.
LIFTING BOARD FOR DROP HAMMERS.
APPLICATION FILED JULY 9, 1910.

1,002,231.

Patented Sept. 5, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES JOSIAH DALLEY, OF RARITAN, NEW JERSEY.

LIFTING-BOARD FOR DROP-HAMMERS.

1,002,231.

Specification of Letters Patent.

Patented Sept. 5, 1911.

Application filed July 9, 1910. Serial No. 571,213.

To all whom it may concern:

Be it known that I, CHARLES J. DALLEY, a citizen of the United States, residing at Raritan, in the county of Somerset and State of New Jersey, have invented a new and useful Lifting-Board for Drop-Hammers, of which the following is a specification.

This invention relates to lifting boards especially designed for use in connection with drop hammers, one of its objects being to provide a device of this character which will not split or break under the blows of the hammer and which will not buckle.

A further object is to provide a hammer board made up of a plurality of strips held together in a novel manner, the strips located at the center of the board being of a harder variety of wood than the remaining strips which are preferably possessed of greater toughness, although, if preferred, all of the wood may be of one kind.

Hammer boards such as heretofore constructed have been either formed in single pieces of wood which soon split, or else have been formed of separate pieces connected by metal straps, bolts, etc. The constant pounding of boards of this type however soon results in the loosening of the metal from the wood, thus rendering the board useless. Laminated boards have been found objectionable because the constant compression and release to which the boards are subjected soon loosens the layers where they are joined together.

One of the objects of the present invention is to provide a hammer board which avoids all of the objections heretofore found.

With the foregoing and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred forms of the invention have been shown.

In said drawings:—Figure 1 is an end elevation of a hammer board constructed in accordance with the present invention. Fig. 2 is an edge view of the board. Fig. 3 is a section on line A—B Fig. 1. Fig. 4 is a detail view of one of the holding or dowel pins. Fig. 5 is a plan view of

a board differing somewhat from the board shown in Figs. 1 to 3 inclusive.

Referring to the figures by characters of reference 1 and 2 designate strips of wood placed together, one of the strips 2 and both of the strips 1 being formed with longitudinally extending grooves 3 in one face thereof while the other strip 2 and both of the strips 1 have longitudinally extending tongues 4 adapted to fit snugly within the grooves 3. All of the strips are of the same size and proportions but the center strips 1 are preferably formed of a very hard wood, while the strips 2 are formed of a tough variety of wood. Bores 5 are cut transversely through the strips 1 and 2, the ends of these bores being flared or enlarged, as indicated at 6, and dowel pins 7 are fitted snugly within the bores, and have their end portions split longitudinally as shown at 8 so as to receive wedges 9.

In assembling the parts of the board, a strong adhesive is placed upon the faces having the tongues and grooves and the said tongues and grooves are also supplied with an adhesive so that, when the strips are forced tightly together, they will cooperate to form a strong board, the parts of which interlock in the manner described. The bores 5 are then formed within the strips and are flared after which the dowel pins 7 are inserted into the bores and spread at their ends by driving wedges into the slits. The end portions of the pins will thus bind tightly against walls of the enlarged ends of the bores and the several strips constituting the board will thus be securely anchored together and it will be impossible to separate them by pounding. These dowel pins and wedges may be provided with an adhesive for holding them together and within the board. Inasmuch as the grains of the strips differ, there is no danger of the board splitting longitudinally of any one of the strips, and, by providing very hard strips at the center of the board and tough strips at other points, the board obtained is rendered very durable and capable of offering the maximum resistance to the hammer.

Instead of utilizing dowel pins for the purpose of holding the strips together, screws, such as shown by dotted lines at 10 in Fig. 5, may be driven through each strip from the inner wall of the groove therein

and through said strip and its tongue and into the next adjoining strip. These screws are arranged in staggered relation and as they are completely embedded within the wood after the strips have been glued together, they will not work loose as a result of the constant pounding to which the board is subjected.

Obviously nails may be used in the same manner as the screws 10. Also, if desired, light bolts or rivets may be used in the hammer board in the same manner as are the dowels 7.

Various changes can of course be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:—

1. A hammer board consisting of inter-engaging strips of wood and means for securing the strips together.

2. A hammer board consisting of inter-engaging strips of wood of different varieties, and means extending transversely through the strips and through the inter-engaging portions thereof for fastening the strips together.

3. A hammer board including inter-engaging tongued and grooved strips of wood, and means extending transversely through the tongued and grooved portions of the strips for fastening said strips together.

4. A hammer board consisting of tongued and grooved inter-engaging strips having transversely extending bores therein, said bores having enlarged end portions, and fas-

tening devices seated within the bores and having enlarged ends within the enlarged end portions of the bores.

5. A hammer board consisting of inter-engaging tongued and grooved strips glued together, said strips having transversely extending bores therein provided with enlarged end portions, dowel pins seated within the bores, and expanding devices within the end portions of the pins.

6. A hammer board consisting of a plurality of inter-engaging tongued and grooved strips of the same size and proportions, the top, bottom and end faces of said strips lying in the same planes respectively, said strips being of different varieties of wood.

7. A hammer board consisting of a plurality of inter-engaging tongue and grooved strips of the same size and proportions, the top, bottom and end faces of said strips lying in the same planes respectively, there being bores extending transversely through the strips and enlarged at their ends, dowel pins seated within the bores, and having diametrical slits in the ends thereof, and wedges seated within the slits and constituting means for expanding the ends of the dowel pins within the enlarged portions of these bores.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES JOSIAH DALLEY.

Witnesses:

JOSEPH J. SMITH,
ISAAC D. DALLEY,