W. CRAINE.

SPLICE FOR JOINERY.

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1,101,786.

Patented June 30, 1914.

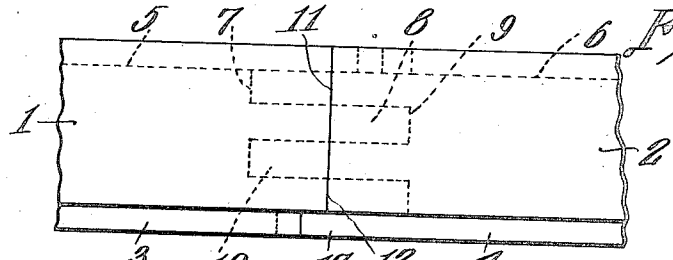


Fig. 1.

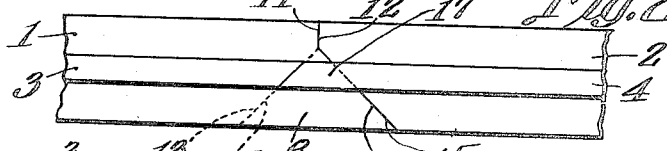


Fig. 2.

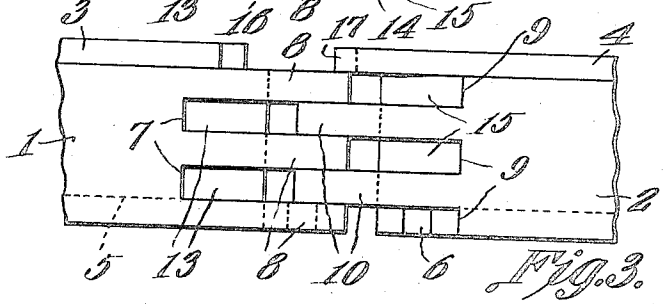


Fig. 3.

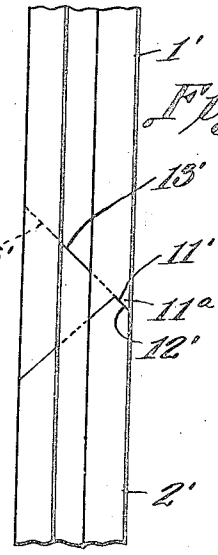


Fig. 4.

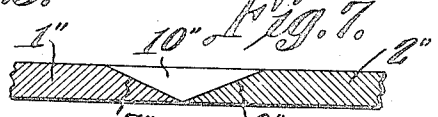


Fig. 7.

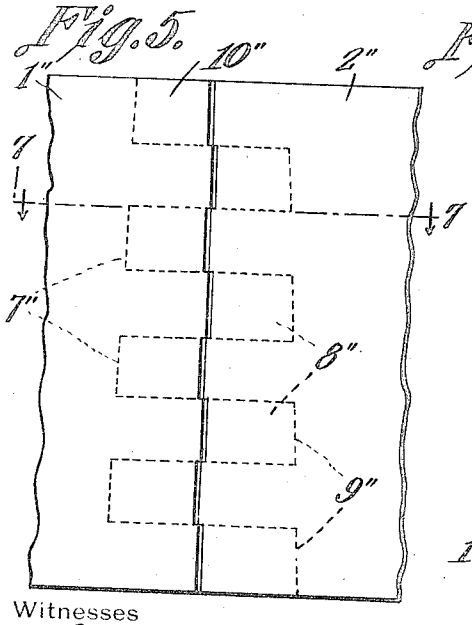


Fig. 5.

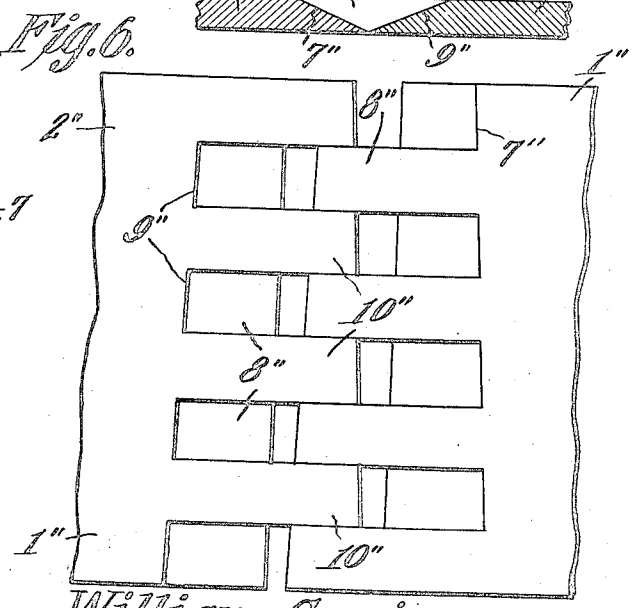


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

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SPLICE FOR JOINERY.

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To all whom it may concern:

Be it known that I, WILLIAM CRAINE, a citizen of the United States, residing at Brookfield, in the county of Madison and State of New York, have invented a new and useful Splice for Joinery, of which the following is a specification.

The present invention appertains generally to joinery, and relates more particularly to a novel and improved manner of splicing the meeting ends of flooring or sheathing boards, siding, clap boards, silo and tank staves, and the like.

It is the object of the present invention to provide a unique dry splice for locking the adjoining ends of boards and other timbers together, whereby the outer side of the joint will be susceptible of wear and tear and to other conditions, without materially effecting the splice proper, or without the liability of the interfitting mortises and tenons being chipped or broken.

It is also within the spirit of the present invention to provide a splice joint for boards, and the like, which will be comparatively simple, substantial and practical in construction, as well as efficient in its use, the boards being readily and inexpensively formed with the interfitting parts, whereby the ends of the boards may be spliced conveniently.

With the foregoing general objects outlined, and with other objects in view, which will be apparent as the nature of the invention is better understood, the present invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiments in the accompanying drawing, wherein:—

Figure 1 is a plan view of the adjoining ends of two flooring or sheathing boards, spliced together in accordance with the present invention. Fig. 2 is a side elevation thereof. Fig. 3 is a bottom view of the said parts, slightly drawn apart or separated. Fig. 4 is a side elevation of a modified form of splice for upright or vertical siding boards, and silo and tank staves. Fig. 5 is a face view of a pair of clap boards spliced together according to the present invention. Fig. 6 is a back or inside view of the clap boards, slightly separated. Fig. 7 is a sectional detail taken on the line 7—7 of Fig. 5.

Referring specifically to Figs. 1, 2 and 3, the numerals 1 and 2 designate the meeting ends of two flooring boards, although the parts 1 and 2 may be taken as typical, so as to represent the upright siding boards for barns and the like. As illustrated, the flooring boards 1 and 2 are provided with the respective tongues 3 and 4 along one edge, and are provided with the respective grooves 5 and 6 along their other edge, whereby the boards may interfit with adjoining parallel boards, as is common.

In carrying out the present invention, the end of the board 1 is provided with a series of alternate mortises 7, and tenons 8, while the end of the board 2 is provided with alternate mortises 9 and tenons 10, the mortises and tenons of the two boards being in staggered relation, and being arranged to interfit with each other.

The meeting ends of the boards 1 and 2 are provided with transverse abutting shoulders 11 and 12, respectively, between their side edges and along their outer sides or faces, and the mortises and tenons are disposed between the said shoulders 11 and 12, and the inner sides or backs of the boards 1 and 2. The end walls of the mortises and tenons 7 and 8, respectively, of the board 1, are beveled in opposite directions, as indicated at 13 and 14, respectively, while the mortises 9 and tenons 10 of the board 2, are similarly beveled, as at 15 and 16 respectively. The beveled ends of the mortises and tenons of each board extend from the respective shoulder or transverse line 11 or 12, along the outer side of the board, to the back or inner side of the board, whereby the interfitting mortises and tenons of the two boards are located between the shoulders 11 and 12, and the inner side or back of the boards. In this manner, the superficial portion of the boards will provide thick wearing portions, underneath or behind which the splice is disposed.

The ends of the boards are so cut, that the end of the tongue 4 of the board 2 projects to form a tenon 17 overlapping the respective tenon 8 of the board 1, the ends of the

tongues 3 and 4, being beveled similar to the end walls 13 and 16 of the mortises 7 and tenons 10, respectively.

It is evident that the mortises and tenons of the boards may be readily formed by the proper tools, as well as the shoulders 11 and 12, whereby the meeting ends of the boards may be conveniently and readily spliced together. The flooring boards may be conveniently laid, the interfitting mortises and tenons being disposed innermost, with the facial portions or the boards exposed, so that only the edges of the shoulders 11 and 12 are visible, or exposed. The facial portions of the boards being devoid of the interfitting splice portions, will be capable of withstanding considerable wear and tear, without the liability of exposing the splice proper, it being noted that there will be no occasion for the tenons being chipped off or broken after the flooring has been laid. This form of splice joint may not only be employed for flooring boards, but may be employed for many other purposes as will be apparent to the joiner.

In Fig. 4, a slight modification has been illustrated, whereby the splice will be particularly adapted for upright siding boards for barns and the like. This figure illustrates the upright boards 1′ and 2′ having the abutting shoulders 11′ and 12′ similar to the corresponding parts above described, with the exception that the shoulders 11′ and 12′ are beveled similar to the beveled walls 13′ and 16′ of the respective interfitting mortises and tenons of the boards. Thus, there is provided a lip portion 11^a overlapping the shoulder 12′ whereby the portion 11^a will shed water over the shoulder portion 12′, in order to reduce the tendency for the water to creep into and through the splice, as might be occasioned by the shoulders 11 and 12 above described. This form of joint is also desirable for upright silo and tank staves.

In the variation illustrated in Figs. 5, 6 and 7, a pair of clap boards 1″ and 2″ are delineated, the clap board 1″ having the alternate beveled mortises 7″ and tenons 8″ along its end, and the clap board 2″ having the alternate beveled mortises 9″ and tenons 10″ along its end. The mortises and tenons of the clap boards are in staggered relation, and are arranged to interfit snugly at the back or inner side of the clap boards, it being observed that the beveled portions of the mortises and tenons of each clap board extend away from a line disposed transversely of the clap board along the face or outer side thereof. Thus, the splice is inclosed, in order that a neat and efficient joint will be provided.

From the foregoing, taken in connection with the drawing, the several advantages and capabilities of the present invention will be obvious to the artisan without further comment, it being noted that the objects aimed at, have been carried out satisfactorily.

Having thus described the invention, what is claimed as new is:—

1. A pair of boards meeting endwise, and each having a series of alternate mortises and tenons along its end, the mortises and tenons of the two boards being in staggered relation and interfitting, and the end walls of the mortises and tenons of each board being beveled in opposite directions from a transverse line along the outer side of the board to the inner side thereof.

2. A pair of boards meeting endwise, and having transverse abutting shoulders extending between their side edges along their outer sides, each board having a series of alternate mortises and tenons along its end, and between the respective aforesaid shoulder and the inner side of the board, the mortises and tenons of the two boards being in staggered relation and interfitting between the said shoulders and the inner sides of the boards.

3. A pair of boards meeting endwise, and having transverse abutting shoulders between their side edges along their outer sides, each board having a series of alternate mortises and tenons along its end and between the respective aforesaid shoulder and the inner side of the board, the mortises and tenons of the two boards being in staggered relation and interfitting, and the end walls of the mortises and tenons of each board being beveled in opposite directions from the respective aforesaid shoulder to the inner side of the board.

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

WILLIAM CRAINE.

Witnesses:
CLARENCE V. BEEBE,
JOHN L. STILLMAN.