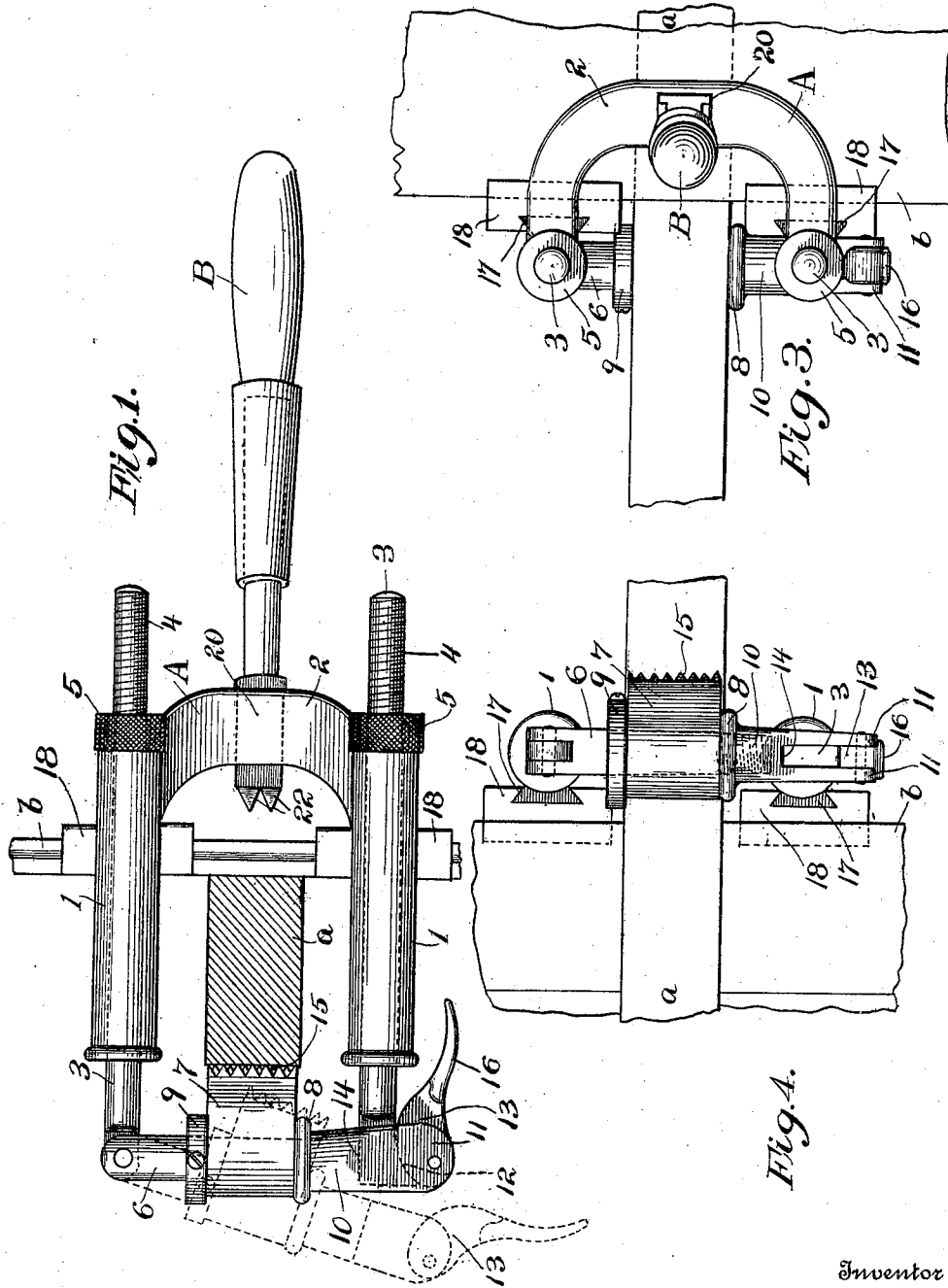


J. C. MOEN.
ADJUSTABLE FLOORING AND SHEATHING CLAMP.
APPLICATION FILED MAY 26, 1910.

981,871.

Patented Jan. 17, 1911.

2 SHEETS—SHEET 1.



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J. C. MOEN.
 ADJUSTABLE FLOORING AND SHEATHING CLAMP.
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2 SHEETS-SHEET 2.

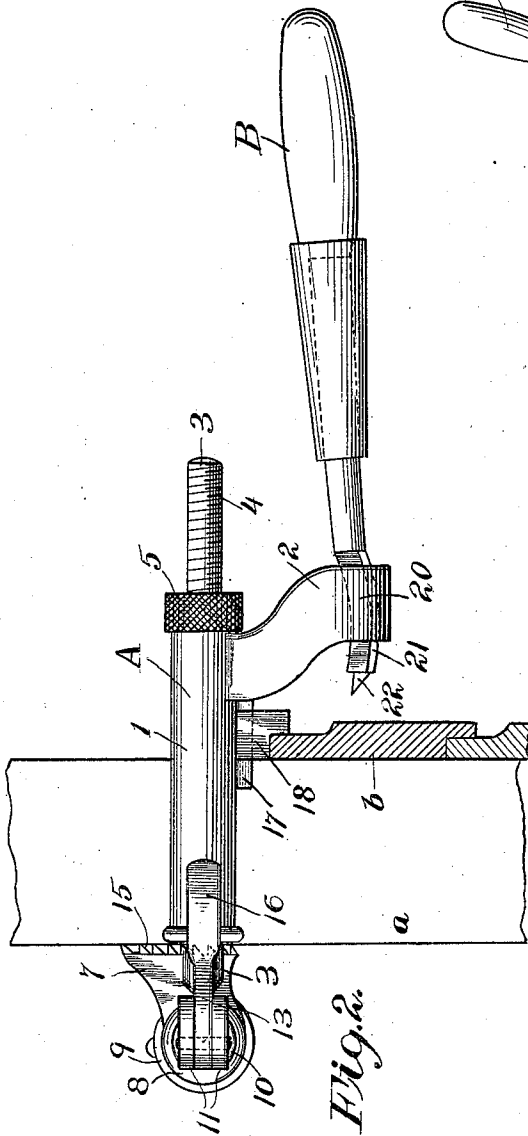
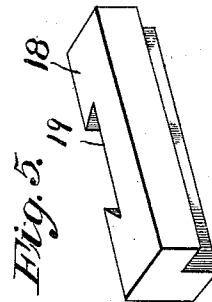
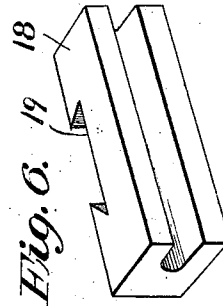
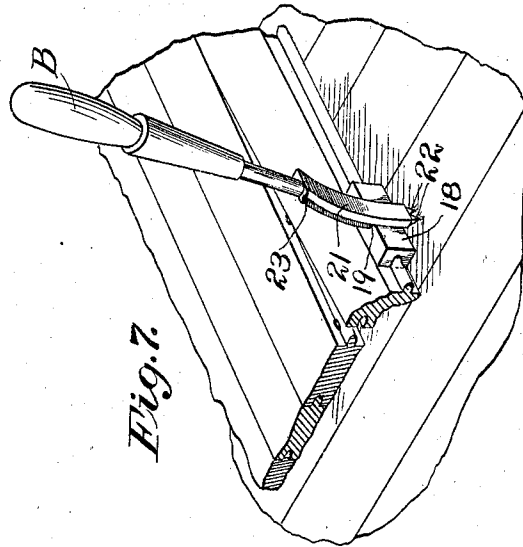


Fig. 2.



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UNITED STATES PATENT OFFICE.

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ADJUSTABLE FLOORING AND SHEATHING CLAMP.

981,871.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed May 25, 1910. Serial No. 563,336.

To all whom it may concern:

Be it known that I, JALMAR C. MOEN, a citizen of the United States, residing at Ashley, in the county of McIntosh and State of North Dakota, have invented new and useful Improvements in Adjustable Flooring and Sheathing Clamps, of which the following is a specification.

This invention relates to clamps designed especially for use by carpenters in laying floor boards, sheathing and the like so that warped boards can be drawn up to make tight joints.

The invention has for one of its objects to improve and simplify the construction and operation of devices of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use, and readily applied to or removed from a studding for drawing up a warped board.

Another object of the invention is the provision of a clamp having improved means for engagement with the studding, joists or the like, said means being readily adjustable to studding and joists of different sizes.

Another object of the invention is the employment of a novel lever adapted for use in connection with the clamp or independently thereof for drawing up warped boards to proper position for nailing.

With these objects in view, and others as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings which illustrate one embodiment of the invention, Figure 1 is a plan view of the clamp shown in use for straightening a sheathing board. Fig. 2 is a side view of the device in the position shown in Fig. 1. Figs. 3 and 4 are opposite end views respectively of the device. Fig. 5 is a perspective view of one of the board engaging blocks. Fig. 6 is a perspective view of another form of block. Fig. 7 is a perspective view of the operating lever used independently of the clamp for drawing up the board.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawings, A designates

the frame of the clamp which consists of two parallel spaced tubular arms 1 which are connected together by a yoke-shaped cross piece or bar 2. In each tubular arm 1 is a longitudinally adjustable rod or screw 3 that has at one end screw threads 4 with which engages an adjusting nut 5 that bears on the inner end of the tubular arm. The arms 1 and 2 are intended to be disposed at opposite sides of the studding or joist *a* to which the board *b* is to be nailed. On one of the rods 3 is hinged a cross member 6 that carries a clamping dog 7. This dog 7 is confined by and freely turned between two abutments 8 and 9 on the cross member 6, the former being in the form of a nut 10 screwed on the member 6 and the latter a ring or equivalent device fastened to the member 6. This nut 10 is formed with upwardly extending spaced members 11 between which the rod 3 engages, the said rod being formed with an inclined surface 12 with which engages a cam 13 pivoted between the members 11 of the nut so that the said rod will be clamped against the inner wall 14 of the recess of the nut into which the rod 3 extends. By this construction the dog carrying member 6 and attached parts can be swung open or closed in clamping the device A or unclamping it from the studding.

When the device is clamped the parts are in the full line position of Fig. 1, the serrated or toothed face 15 of the dog being engaged with the studding. By swinging the lever 16 of the cam outwardly, the member 6 and attached parts can be unclamped and swung open as indicated by dotted lines in order to remove the clamp from the studding. Upon the arms 1 are arranged dove tailed webs or guides 17 on which are applied blocks 18 that have dove tailed recesses 19 to fit the dove tails on the arms. These blocks are arranged to engage the edge of the board that is to be straightened and nailed in place. For different forms of boards, as for instance sheathing and flooring boards, the blocks will be shaped correspondingly to fit the grooved or tongued edges of the board. In the center of the yoke 2 is provided an opening 20 for receiving the end 21 of the operating lever B, the said lever projecting outwardly from the frame A from the side of the board *b* opposite from the studding or joist *a*. When the clamp is

fastened to the joist or studding and the engaging blocks 18 applied to the board to be straightened, pressure is applied to the lever B in a direction to cause the warped board to snugly fit the board already nailed or laid, and while the warped board is thus held it is nailed to the studding or joist. During this drawing up of the board the frame A swings about the dog 7 as a center, said dog being held firmly in engagement with the studding or joist by the teeth 15. When the board is nailed the clamp is opened by simply throwing the lever 16 upward or outward to release the cam 13 from the abutments 12 and the rod 3 and after being thus released the member 6 and its attached parts can be swung open far enough to either remove the clamp or adjust it to another position.

When the clamp cannot be used, as for instance in a case where flooring boards are to be laid over rough boards, the lever B is used alone or separately from the clamp. The lever has on its end 21 one or more teeth 22 which serve as fulcrum points, and on the curved portion 21 is a dove tail guide or web 23 to which can be applied one of the clamping blocks 18. In using the lever this way the block 18 is applied to the outer edge of the flooring board to be straightened and the teeth 22 embedded in the adjacent rough flooring board as clearly shown in Fig. 7 and then by applying pressure to the lever the warped board can be drawn up tight in contact with the already laid board.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention relates, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claims.

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

1. A device of the class described comprising a frame having spaced parallel tubular members, rods longitudinally adjustable in the members, a dog carrying element pivotally connected with one of the rods, means on said element for detachably connecting the same with the other rod, and an operating handle detachably connected with the frame.

2. A device of the class described comprising tubular members, rods adjustably mounted in the members, an element hingedly connected with one of the rods, means for detachably connecting the element to the other rod, a dog mounted on the element and

capable of pivoting movement, and a handle connected with the frame.

3. A device of the class described comprising a frame, parallel rods mounted thereon, means for adjusting the rods on the frame, a transversely extending element hingedly connected with one of the rods at the end thereof and detachably connected with the corresponding end of the other rod, a dog mounted on the element, and a handle connected with the frame.

4. A device of the class described comprising a frame including spaced tubular members which open at both ends, a rod slidable longitudinally through each member, a nut threaded on each rod and engaging the inner end of the adjacent member, means on the outer ends of the rods for engaging with the studding, elements on the members for engaging with the board to be straightened, and an operating handle connected with the frame.

5. A device of the class described comprising a frame consisting of spaced tubular members, a connecting yoke, longitudinally adjustable elements in the tubular members, a swinging dog carrier hingedly connected with one of the elements, means on the carrier for detachably engaging the other element, and a dog on the carrier.

6. A device of the class described comprising a frame, spaced parallel members adjustably mounted thereon, an abutment on one of the members, a carrier hingedly connected with the other member, a cam on the carrier arranged to engage the said abutment, and a joist engaging dog mounted on the carrier.

7. A device of the class described comprising a frame, spaced parallel members adjustably mounted thereon, an abutment on one of the members, a carrier hingedly connected with the other member, a cam on the carrier arranged to engage the said abutment, a joist engaging dog mounted on the carrier, spaced abutments on the carrier between which the dog is confined providing for relative turning of the dog and carrier.

8. A device of the class described comprising a frame including spaced tubular members and a connecting yoke, said yoke having an opening, a handle removably mounted in the opening of the yoke, board engaging elements mounted on the members, rods extending through the members, means for adjusting the rods, and a dog carrying element extending from one rod to the other and connected therewith.

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

JALMAR C. MOEN.

Witnesses:

E. T. CLYDE,
MARTIN MOEN.