

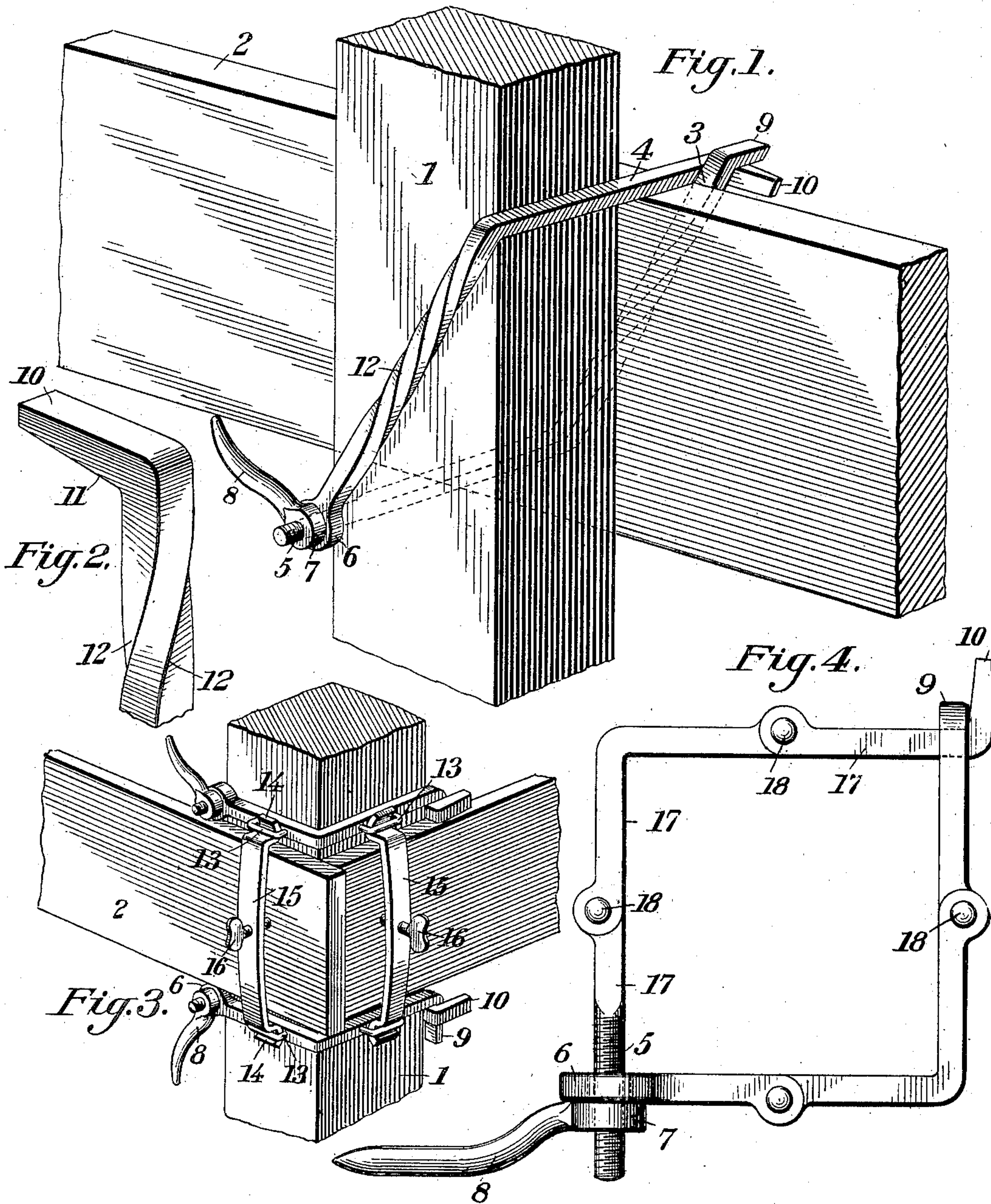
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Patented Aug. 5, 1902.

J. LALLY.
STAGING CLAMP.

(Application filed Nov. 25, 1901.)

(No Model.)



Witnesses:

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STAGING-CLAMP.

SPECIFICATION forming part of Letters Patent No. 706,185, dated August 5, 1902.

Application filed November 25, 1901. Serial No. 83,636. (No model.)

To all whom it may concern:

Be it known that I, JOHN LALLY, a citizen of the United States, residing at Waltham, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Staging-Clamp, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to staging-clamps, the object in view being to provide a simple and effective clamp adapted to firmly bind a ledger against a pole or standard or with the addition of auxiliary ledger-holders to firmly support one or more ledgers, one of which may constitute a putlog against the pole or standard where said ledgers meet. The result is obtained without resorting to the use of nails, thus enabling the clamps to be quickly and readily associated with the poles, ledgers, and putlogs.

With the above general objects in view the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view showing the improved staging-clamp applied to a pole and ledger and arranged diagonally of the point of intersection of said parts. Fig. 2 is an enlarged detail perspective view showing one of the interlocking hooks of the clamp members. Fig. 3 is a perspective view illustrating the manner of securing a pair of ledgers or a ledger and a putlog to a pole. Fig. 4 is an enlarged plan view of a modified form of staging-clamp.

Similar numerals of reference designate corresponding parts in all the figures.

In Fig. 1 the staging-clamp is shown applied to a pole or standard 1 and a ledger 2, the said clamp extending diagonally of the point of intersection or crossing of the said pole and ledger. The staging-clamp is composed of two members 3 and 4, each of which in the simpler form of the invention is substantially L-shaped or composed of two portions extending at right angles to each other, as clearly shown in Fig. 1. One of said members 3, which for convenience may be termed the "bolt" member, is provided at one ex-

tremity with a threaded end 5, while the other member 4 is provided at its corresponding end with an eye 6, through which the threaded part 5 is adapted to be inserted. After the threaded part or shank 5 is inserted through the eye 6 a nut 7 is placed upon the shank 5 in order to force the two members of the clamp into operative engagement with the part or parts of the scaffold with which they are associated. The nut 7 is preferably provided with an operating-handle 8, so as to avoid the necessity of using a wrench. At their opposite extremities the clamp members 3 and 4 are provided with interlocking hooks 9 and 10. The inner face of one of said hooks, as 9, is by preference extended substantially at right angles to that portion of the member which is bent to form the hook, while the other hook 10 has its inner face beveled or inclined, as shown at 11, to form in effect a wedge face which coöperates with the other member of the clamp adjacent to the hook 9 to force the members of the clamp into closer engagement with the pole and ledger preparatory to the final operation of tightening the handle-nut 7. In other words, as the hooked end of the member 3 is forced toward the body of the member 4 it is caused to ride against the wedge face 11, with the result that both clamp members are forced into closer relation to the pole and ledger, as will be apparent in Fig. 1. Each clamp member is preferably composed of a bar or strip of metal, which is square or rectangular in cross-section, and one side or portion of each clamp member is twisted, as shown in Figs. 1 and 2, into the form of a spiral, thereby providing spiral biting edges 12, which, as the clamp members are forced together, embed themselves in the pole and ledger and prevent any possibility of relative slipping between the pole and ledger after the handle-nut 7 has been sufficiently tightened.

In Fig. 3 I have shown the manner of utilizing a pair of staging-clamps for securing the adjacent ends of a pair of ledgers or a ledger and a putlog where they meet at a corner pole. The clamps are secured on the pole one above the other and at a distance from each other slightly greater than the

width of the ledger and putlog. Each clamp is provided with one or more keepers 13 to receive the hooked extremities 14 of one or more yokes or ledger-holders 15, provided intermediate its ends with a clamping element, preferably in the form of a thumb-screw 16, the inner end of which is adapted to bear against the adjacent surface of the ledger or putlog and force the same into close engagement with the pole 1. The ledger-holders or yokes 15 may be readily disconnected from the staging-clamps when it is desired to use the clamps by themselves, as shown in Fig. 1.

In Fig. 4 I have illustrated a modified form of clamp which will further facilitate the application of the clamp to a pole and ledger or the like, the said modification residing in constructing each clamp member of several sections 17, pivotally connected with each other at points 18 intermediate their ends. The formation of the clamp members in pivotally-connected sections does not interfere in any way with the principle of the clamp hereinabove described, but obviously facilitates the placing of the clamp as a whole in position.

The spiral twisting of portions of each of the clamp members enables a firm and positive hold to be obtained on the portions of the scaffold with which the clamp is associated and does away with the use of points or barbs applied to the clamp members and which not only tend to weaken the clamp, but are also liable to break off and render the clamp useless. The twisting of portions of the clamp does not interfere to any extent with the strength of the clamp and provides a permanent biting edge or portion.

It is of course preferred to spirally twist a portion of each of the clamp members so as to obtain a firm hold both upon the ledger and the pole. Another advantage of the construction described resides in the fact that the terminal hooks may be readily engaged and disengaged by merely loosening the nut. This not only saves time in applying and removing the clamps, but also saves the screw-threads from becoming rapidly worn away and finally destroyed.

Having thus described the invention, I claim as new—

1. The combination of two relatively movable clamping members one of which is provided with a spiral biting edge, and means for forcing the spiral biting-edge portion of said member sidewise toward the oppositely-arranged portion of the other member.

2. The combination of two relatively movable clamping members one of which is twisted to form a spiral-like biting edge, and means for forcing the spiral biting-edge portion of said member sidewise toward the oppositely-arranged portion of the other member.

3. The combination of two relatively movable clamping members having interlocking terminal hooks, one of which members is provided with a spiral biting edge, and means for forcing the spiral biting edge of said member sidewise toward the oppositely-arranged portion of the other member.

4. In a staging-clamp, two relatively movable members having interlocking terminal hooks one of which is provided with a wedge face, one of said members being provided with a spiral biting edge, and means for forcing the members into clamping position.

5. In a staging-clamp, two relatively adjustable members adapted to engage a pole or standard and one of which is provided with a keeper, in combination with a ledger-holder separable from both of said members and having means for engaging said keeper.

6. The combination with a pair of staging-clamps, of one or more ledger-holders separable therefrom and extending between the staging-clamps.

7. The combination with a pair of staging-clamps, of one or more ledger-holders extending between the staging-clamps and detachably connected therewith each holder carrying a clamping element.

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

JOHN LALLY.

Witnesses:

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