

H. HAERING & H. ALLES.

Scaffold-Pole Clamps.

No. 143,448.

Patented Oct. 7, 1873.

Fig. 1.

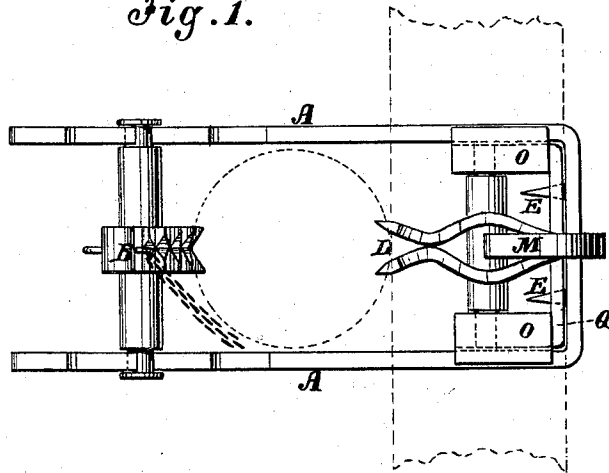


Fig. 3.

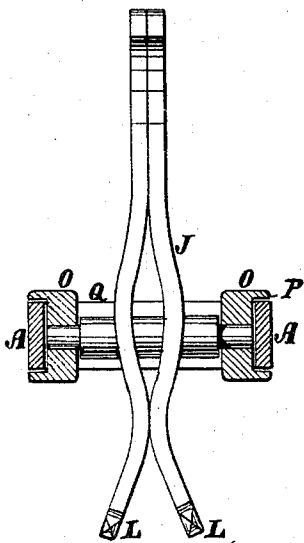
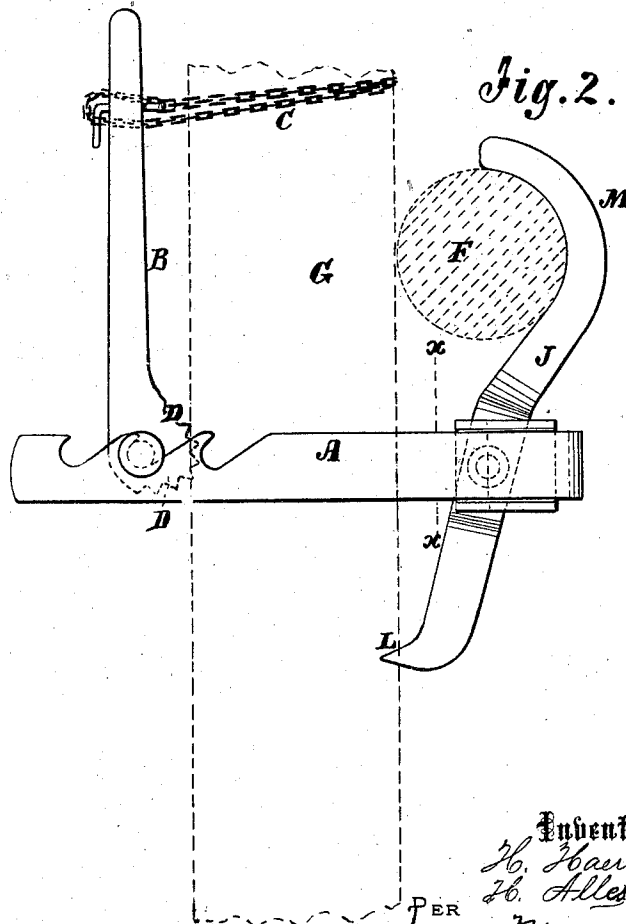


Fig. 2.



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UNITED STATES PATENT OFFICE.

HENRY HAERING AND HERMAN ALLES, OF NEW YORK, N. Y.

IMPROVEMENT IN SCAFFOLD-POLE CLAMPS.

Specification forming part of Letters Patent No. **143,448**, dated October 7, 1873; application filed March 8, 1873.

To all whom it may concern:

Be it known that we, HENRY HAERING and HERMAN ALLES, of the city, county, and State of New York, have invented a new and Improved Pole-Clamp, of which the following is a specification:

For fastening the horizontal poles to the vertical poles of scaffolds, we propose to have a short lever pivoted at or about the middle in a yoke next to its bottom or bow end, so that the lower end, which is curved to fit the side of a round pole, will embrace the horizontal pole and press it tight against the side of the vertical pole, when the yoke embraces the vertical pole, and is powerfully drawn against it by an eccentric lever pivoted in the bars at the open end on the side of the vertical pole opposite the lever, so as to force the upper end of the lever against the vertical pole above the yoke, and this upper end has points which are forced into the pole, so that they and points on the face of the eccentric lever, which acts against the vertical pole, will be forced into the wood and prevent the clamp from slipping down. The eccentric lever is fastened with a binding-chain pressed around the pole and attached to it. The lever which clamps the horizontal pole is detachably connected to the yoke, so that the yoke and the eccentric lever may be used without the clamping-lever for a splice-clamp for clamping two poles together lengthwise according to a method heretofore patented to us January 7, 1873.

Figure 1 is a plan view of our improved pole-clamp, with the poles to be clamped indicated in dotted lines. Fig. 2 is a side elevation of Fig. 1, and Fig. 3 is a section taken on the line *x x* of Figs. 1 and 2.

Similar letters of reference indicate corresponding parts.

A is the yoke; B, the eccentric lever, and C the binding-chain, comprising the splicing-clamp, which are the same which we have heretofore used for fastening two poles in a splice, the poles being placed between the eccentric lever and the bottom of the yoke, and clamped firmly between them by turning the eccentric lever up or down, and fastening it by the binding-chain, as represented in Fig. 2,

so that the points D of the large side of the head and the points E in the bottom of the yoke are pressed into the wood, and the two poles are firmly pressed together.

Now, for fastening the horizontal poles F to the vertical poles G, so as to dispense with the tying of them by ropes, as we already do the tying of the splices, and thus greatly simplify and cheapen the construction of scaffolds, we propose to combine a lever, J, with this clamp, adapted for fastening the horizontal poles, as shown in the drawings, the said lever being pivoted in the clamp, so that the upper end, having points L to secure the clamp against sliding down, will be forced into the vertical pole around which the yoke is arranged, while the part below the pivot, which is curved, as shown at M, to embrace the side of the pole F, will bind it firmly against the pole G by the action of the eccentric lever and the yoke A; and in order to adapt the eccentric lever and the yoke to be used for a splice-clamp, we attach this lever J detachably, so that it can be readily taken out.

This may be done in any approved way; but we prefer to do it by pivoting the lever in the two blocks O, with a groove, P, in one side, and connected together by the bar Q, so as to slide into the yoke from the open end; but we may connect it in notches in the bars of the yoke, the same as the eccentric lever is connected, though it would not be so desirable.

The arrangement is such that the clamp binds stronger as the weight on the scaffold is increased.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination of the clamping-lever J with the yoke A, eccentric lever B, and binding-chain C, substantially as specified.

2. The combination of the lever J, blocks O, bar Q, and yoke A, substantially as specified.

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Witnesses:

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