(No Model.)

J. A. MOROSS.

SCAFFOLD BINDER.

No. 326,514. Patented Sept. 15, 1885.

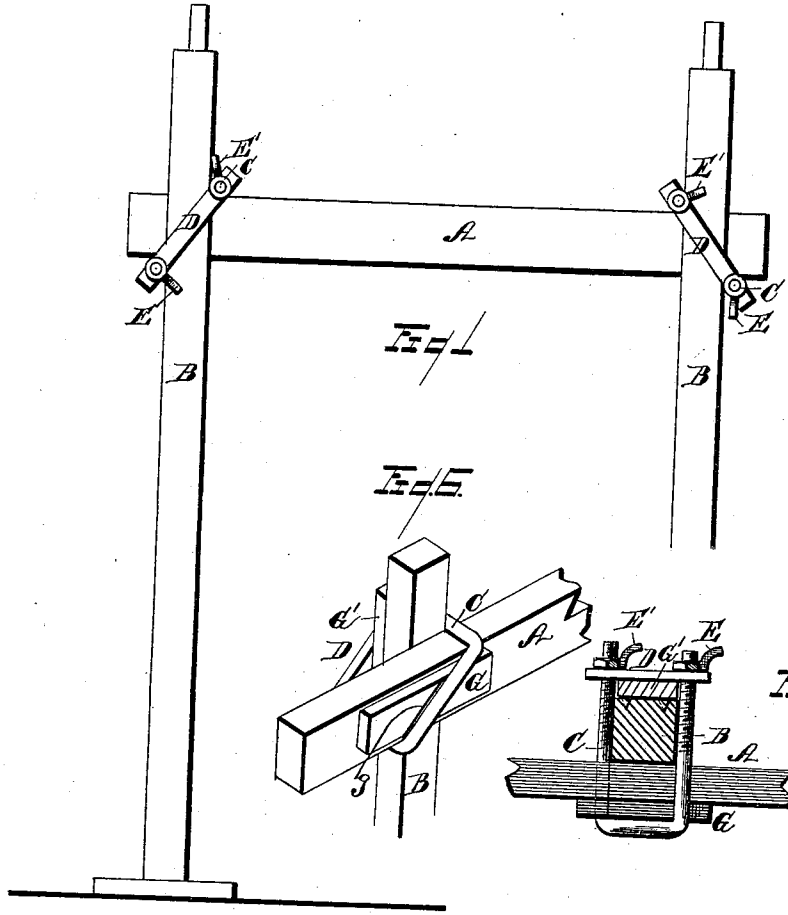


Fig. 1

Fig. 6.

Fig. 2.

Fig. 3

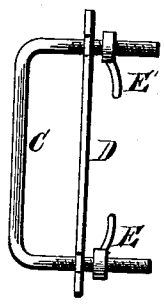


Fig. 4.

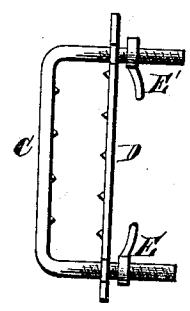
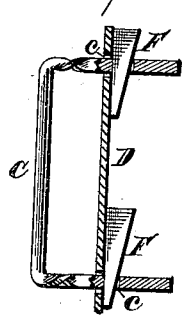


Fig. 5.



WITNESSES

Samuel C. Thomas

H. B. O'Hogherty.

INVENTOR

Joseph A. Moross

By W. W. Leggett

Attorney

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH A. MOROSS, OF DETROIT, MICHIGAN.

SCAFFOLD-BINDER.

SPECIFICATION forming part of Letters Patent No. 326,514, dated September 15, 1885.

Application filed October 29, 1884. (No model.)

To all whom it may concern

Be it known that I, JOSEPH A. MOROSS, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Scaffold-Binders; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the combinations of devices and appliances, hereinafter described, and more particularly pointed out in the claims.

My invention relates to improvements in scaffold binders or clamps, and is designed to provide a novel binder, simple in its construction, which may be readily applied and changed, and which shall effectually bind the posts and the "ledgers" together, so as to be absolutely safe and strong without liability of slipping and accidental disengagement and capable of supporting any desired weight.

The invention is illustrated by the accompanying drawings, in which Figure 1 is a side elevation illustrating my invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a separate view of the device. Fig. 4 is a modification. Fig. 5 is another modification. Fig. 6 is a perspective.

A represents a ledger of the scaffold; B, the posts or poles; C, the yoke of my improved clamp, adapted to be located about the post and ledger, as shown in Fig. 1, said yoke being made of a single solid bar of round or square metal, having its ends bent at a suitable angle thereto. D is the clamping-bar, constructed of round or square metal, with eyes to receive the ends of the yoke.

The ends of the yoke, if made of round iron, are screw-cut, as shown in Figs. 3 and 4. E and E′ are thumb-nuts located upon the ends of the yoke, adapted and arranged to force the clamping-bar against the ledger or post, as the case may be, and to tighten the yoke and bar firmly thereon.

Instead of screw-cutting the ends of the yoke they may be constructed with one or more orifices, *c*, adapted to receive a wedge-shaped key, F, whereby the yoke and bar are clamped upon the post and ledger. The latter construction may be employed when the yoke is made of square iron.

The clamping-bar D may be toothed or serrated on its inner face, as in Fig. 4, or the yoke C may be similarly toothed or serrated, the object being to provide for the firm engagement of the bar and yoke with the timber in erecting the scaffold. Between the clamping-bar D and the upright B, I arrange a shoe, G′, and, as here shown, between the yoke C and the ledger A, I arrange a similar shoe, G, the shoes being preferably toothed or serrated on their inner faces to firmly engage the ledger and the upright. These shoes provide for a firm and substantial grip when it is desired to erect the scaffold for sustaining very heavy weights, which grip is rendered most effectual by the teeth of the shoes penetrating and engaging the ledger A and the upright B, thereby positively preventing the timbers from slipping. The shoe G′ is grooved to receive the clamping-bar, thereby adding to the security of the scaffold in preventing slipping of the binding devices.

It will be seen that by my invention I provide for erecting a scaffold without perforating or boring holes into or through any of the timbers, which is very important, in order that the timbers be not weakened by holes. The cost of erecting a scaffold is reduced by my invention, which is due to the simplicity of the devices used, and the fact that no boring of the timbers is demanded. Ordinarily scaffolds are made of pine, and frequently they are required to stand exposed to the weather. If bolt-holes are made in the timbers, as ordinarily, they are not only weakened, but water will work into the timber, thereby causing them to rapidly rot and endangering the safety of the scaffold. Such serious objections are avoided by my invention, and I further avoid the necessity of bracing or staying the scaffold by the use of extraneous contrivances.

What I claim is—

1. A scaffold-binder consisting of a yoke having its ends bent to form end arms, a cross-bar constructed to receive and connect said end arms, binding devices engaged upon said end arms to hold and adjust said cross-bar upon said arms, and a shoe grooved to receive

the cross-bar to fit inside the same, substantially as described.

2. The combination, with the ledger A and upright B, of a yoke having its ends bent to form end arms, a cross-bar constructed to receive and connect said end arms, and a binding device engaged upon each of said end arms to hold and adjust said bar upon said arms, the construction being such that the ledger and the upright may be embraced by said yoke and cross-bar and held firmly together by the adjustment of the bar upon said arms by said binding devices, substantially as described.

3. A scaffold-binder consisting of a yoke having its ends bent to form end arms, a cross-bar constructed to receive and connect said arms, a binding device engaged upon each of said arms to adjust and hold the cross-bar thereon, a shoe, G', grooved to receive the cross-bar, and a toothed or serrated shoe, G, constructed and arranged substantially as described.

4. The combination, with a ledger, A, and an upright, B, of a yoke having its ends bent to form end arms, a cross-bar constructed to receive and connect said arms, binding devices engaged upon said end arms to hold and adjust said cross-bar thereon, and one or more shoes, the construction and arrangement being such that the ledger and the upright may be embraced by said yoke and cross-bar with intervening shoe and be held firmly together by the adjustment of said binding devices upon the end arms, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

JOSEPH A. MOROSS.

Witnesses:
N. S. WRIGHT,
M. B. O'DOUGHERTY.