

UNITED STATES PATENT OFFICE.

JACOB L. LIGHTNER, OF KNOXVILLE, ILLINOIS, ASSIGNOR OF ONE-HALF TO
G. M. D. EWALT AND ISAAC B. GUM, OF SAME PLACE.

SCAFFOLD-SECURING DEVICE.

SPECIFICATION forming part of Letters Patent No. 540,262, dated June 4, 1895.

Application filed March 12, 1895. Serial No. 541,476. (No model.)

To all whom it may concern:

Be it known that I, JACOB L. LIGHTNER, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Scaffold-Securing Devices; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to scaffolds for buildings, and has, for its object, the locking together and securing of such structures, in a manner that will render them absolutely safe as regards collapsing, or falling away from the building.

A further object is to provide a means for the instant adjustment, or removal, of any part of the structure, while the building is in the course of construction.

The device to be described and claimed herein, is very simple and easy to manipulate. No separating of the parts is necessary in order to adjust or entirely remove it from the scaffold.

In order that the invention may be fully understood, I will proceed to describe it, with reference to the accompanying drawings, in which—

Figure 1 represents the complete device. Fig. 2 illustrates the manner of operating. Fig. 3 illustrates the yoke in detail. Fig. 4 illustrates the yoke-link and key-plate in detail. Fig. 5 illustrates in detail the yoke and hook for securing to the building. Figs. 6 and 7 are details of the yoke and key-plate.

A and B, represent the customary vertical and horizontal parts of a scaffold. B is usually about four feet long. Its inner end rests upon the building and its outer end is secured to the vertical part A. Placed upon the parts B of the scaffold, are boards for supporting the men and material.

To the inner end *b* of part B, I secure a yoke *c*, between the lower open ends of which is pivoted a hook *d*. Upon the back of this

hook is a projection *e*, which sinks into the lower edge of B and locks the yoke *c* when hook *d* is in working position, and falls away when out of working position, leaving yoke *c* free to be removed at will. See Fig. 5. This device is used to secure the inner end of part B to the building.

The outer end *b'* of part B is secured to part A by a yoke G, the open free ends of which receive a plate F formed with an opening *f* at one end and a slot *f'* at the other end. The arms of yoke G are threaded at *g* to receive tightening nuts H H'. Between nut H' and plate F is a key-plate I formed with a lip *i* which engages the edge of plate F and secures said plate from displacement.

The operation of the device in putting up the scaffold, is as follows: Hook *d* is first put to place on the building. Part B is then swung to position causing projection *e* to securely lock yoke *c*. The outer end *b'* of part B is then adjusted to place. Yoke G is slipped to position shown in Fig. 2 and its teeth *g*³ are set into the wood as seen in Fig. 7. Link F is then swung to position shown in Fig. 1. Key-plate I is placed in position and locked by nut H'. By tightening the nuts H H' the device securely locks parts A and B together.

In Fig. 3 I have shown the yoke G formed with its end arms flat for a portion of their length for the purpose of affording cutting edges *g*², which, in case of slipping or settling of part B, will sink into part A and more securely lock the parts together. With this construction key-plate I is formed with a lip *i'* to give extra strength to the slotted end *f*² of plate F, as the sinking of part B would have a tendency to spread the arms of yoke G and bring extra strain upon the end *f*² of plate F.

With the construction shown in Figs. 6 and 7, the slightest settling of parts will cause the teeth *g*³ to sink deeper into part A, and when these teeth are properly set to place, slipping is impossible. With this yoke, key-plate shown in Fig. 6 is used.

To take down the scaffold it is only necessary to release nuts H H', swing link F to position shown in Fig. 2, and yoke G with all its parts may be removed. Part B is then swung down, and hook *d* is removed.

I am aware that there are similar devices for scaffolds, and I do not claim the device broadly.

Having now described my invention, what
5 I claim as new therein, and desire to secure by Letters Patent, is—

1. A scaffold locking device, consisting of a yoke, one arm of which is provided with a swinging plate, the opposite end of said plate
10 being formed with a slot at right-angles to its length, and arranged to embrace the other arm of the yoke when said plate is swung to locking position; said yoke being provided at its free ends with suitable tightening or
15 locking devices.

2. A scaffold securing device consisting of

a yoke provided with a plate formed with an opening at one end, a slot at its other end, and a key-plate for guarding said slot; said yoke being provided at its free ends with suitable
20 tightening and locking devices.

3. In a scaffold structure, a bar supported at one end by a hook eccentrically pivoted to a yoke, in combination with a device for securing said bar to the scaffold, as shown and
25 described.

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

JACOB L. LIGHTNER.

Witnesses:

F. D. HUGGINS,

JAS. N. VAN GILDER.