No. 734,620. PATENTED JULY 28, 1903.

A. T. SEARS.

SCAFFOLD BINDER.

APPLICATION FILED FEB. 25, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

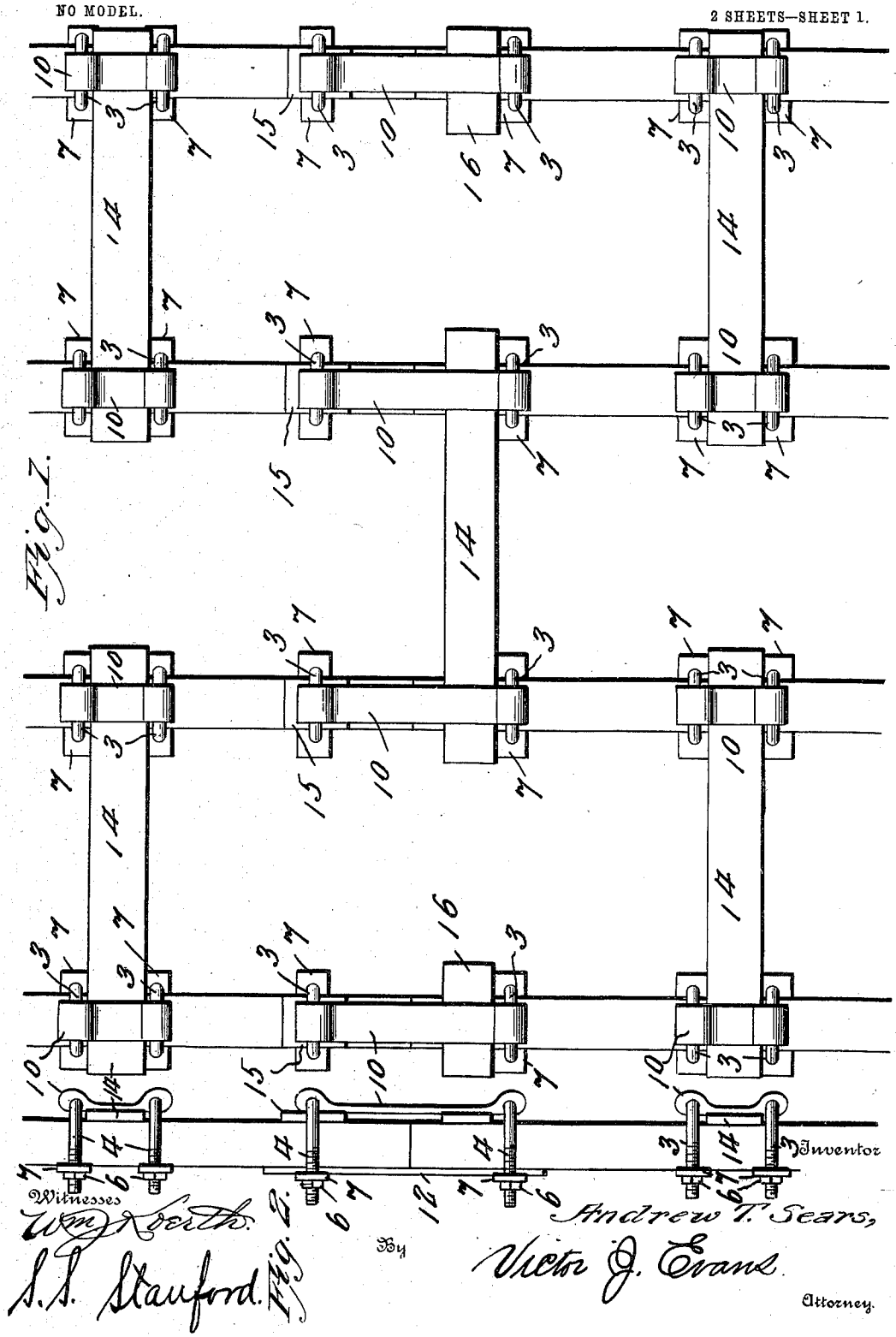


Fig. 1.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

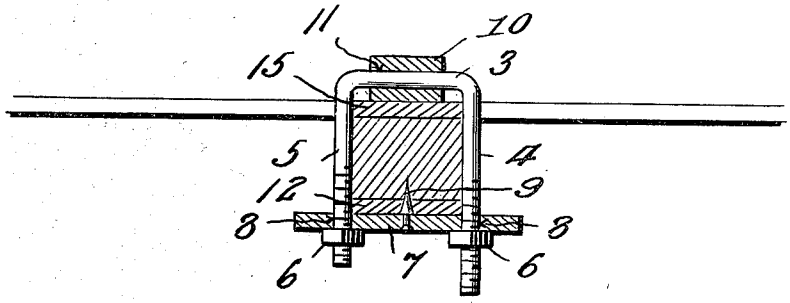


Fig. 4.

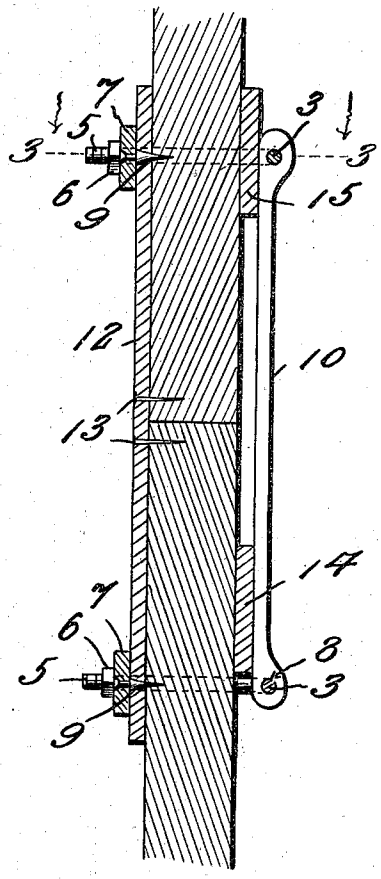
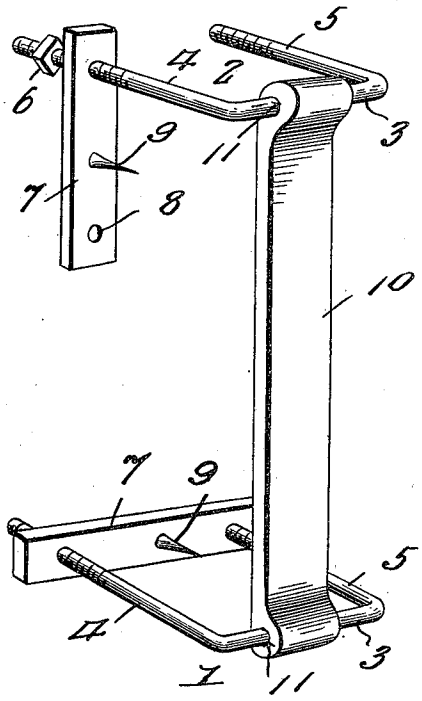


Fig. 5.



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No. 734,620. Patented July 28, 1903.

UNITED STATES PATENT OFFICE.

ANDREW T. SEARS, OF PORTLAND, MAINE.

SCAFFOLD-BINDER.

SPECIFICATION forming part of Letters Patent No. 734,620, dated July 28, 1903.

Application filed February 25, 1903. Serial No. 145,105. (No model.)

To all whom it may concern:

Be it known that I, ANDREW T. SEARS, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented new and useful Improvements in Scaffold-Binders, of which the following is a specification.

This invention relates to scaffold-binders, the object in view being to provide a simple, cheap, and reliable device for splicing the pole-sections of a scaffold structure, whereby the scaffold may be built to any desired height without danger of collapsing and jeopardizing the lives of the workmen supported thereby.

In addition to the above-described function of the scaffold-binder the invention also provides for supporting the ledgers or boards which form the support for the putlogs upon which the planks which form the platforms rest.

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

In the accompanying drawings, Figure 1 is a front elevation of a portion of a scaffold, illustrating the application and use of the scaffold-binder of this invention. Fig. 2 is an edge view of the same, showing the manner in which the pole-sections are clamped by the members of the binder, held together and in alinement with each other. Fig. 3 is a large detail horizontal section through a pole, showing the manner in which the ledger is supported and the clamp prevented from slipping on the pole. Fig. 4 is a vertical longitudinal section of the same, and Fig. 5 is an enlarged perspective view of the scaffold-binder complete.

Like reference-numerals designate corresponding parts in all figures of the drawings.

Referring to the drawings, and particularly to Fig. 5, it will be seen that the scaffold-binder comprises a pair of clamping members 1 and 2, which are the same in all respects, each clamp member being formed, by preference, of a rod of any desired size bent in the form of a three-sided frame to comprise the central or cross-bar portion 3 and the terminal portions or arms 4 and 5, one of the arms, 4, being made longer than the other arm, 5, and both of the arms being threaded to receive nuts 6, which operate against the outer surface of a backstay 7. The backstay of each clamp member consists of a metal bar or plate provided adjacent to its opposite ends with openings 8 to receive the arms 4 and 5 of the clamp members, thus enabling the nuts 6 to force the backstay against that face of the pole which is opposite to the yoke hereinafter described. Each backstay is also provided about centrally with a sharpened or pointed prong 9, which under the pressure of the nuts 6 is adapted to be forced into the pole. The clamp members 1 and 2 are connected by means of a yoke 10 in the form of a metal strap having the extremities thereof enlarged to provide for the formation of openings 11, in which the cross-bar portions 3 of the clamp members are pivotally received. The yoke 10 may be made of any desired length, and the length thereof is sufficient to enable the clamp members to grip the end portions of the pole-sections at a suitable and safe distance from the abutting extremities thereof. By making the arms 4 of the clamp members longer than the arms 5 the backstays 7 may be moved at one end out of engagement with the arms 5 without entirely detaching them from the clamp members, this idea being fully illustrated at the upper end of Fig. 5. This prevents loss of the backstays, which need never be removed from the clamp members.

In applying the scaffold-binders to the sections of a pole it is preferred to employ an auxiliary backing-strip or splice-bar 12, which may for convenience be of wood. This splice-bar crosses the joint between the ends of the pole-sections, as shown in Fig. 4, and is held in place by means of a couple of nails or other suitable fasteners 13. The clamp members 1 and 2 are then placed around the pole, and the backstays 7 are brought to bear against the backing-strip or splice-bar 13, as shown in Figs. 3 and 4. The ledgers 14 are inserted between the opposite face of the pole-sections and the yoke 10, while shorter pieces of wood are inserted between the front face of the pole-sections and the adjacent end of the yoke, as shown in Fig. 4, the same forming fillers or spacing-blocks 15. In this way

the abutting extremities of the pole-sections are firmly united and held together without mutilating or injuring either the pole-sections or the ledgers. The putlogs (not shown) simply rest on the ledgers in a manner well understood by those familiar with the art to which this invention appertains.

By reference to Fig. 1 the method of setting up a scaffold will be readily understood. Therein it will be seen that it is necessary to use only half the usual numbers of ledgers 14, as they may be arranged alternately. It is also perfectly practical to fasten a short ledger 16 between the yoke 10 and the adjacent face of the pole upon which to rest the putlogs.

The scaffold-binder hereinabove described is simple and cheap in construction, is strong, durable, and reliable in use, and renders the scaffold structure much more secure and safe than under the old system of nailing splice bars or strips to the pole-sections and also nailing the ledgers in place. The binders may be applied to and removed from the pole-sections in half the time required to nail the parts together, and one of the main advantages of the invention resides in the fact that the pole-sections, ledgers, &c., are not mutilated, injured, or destroyed and may therefore be repeatedly used in the setting up of scaffolds.

Having thus described the invention, what is claimed as new is—

1. A scaffold-binder comprising a yoke having clamping members pivoted to opposite ends thereof and consisting of U-shaped frames having legs with threaded terminals, and backstays movably engaging the legs of the frames and having intermediate spikes.

2. A scaffold-binder comprising a yoke with clamp members pivotally secured to the opposite ends thereof and each consisting of a three-sided frame having terminal portions of different lengths screw-threaded to receive nuts, and a backstay provided with openings adjacent the ends for projection therethrough of the said terminal portions and having a spike extending therefrom between the ends.

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

ANDREW T. SEARS.

Witnesses:
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