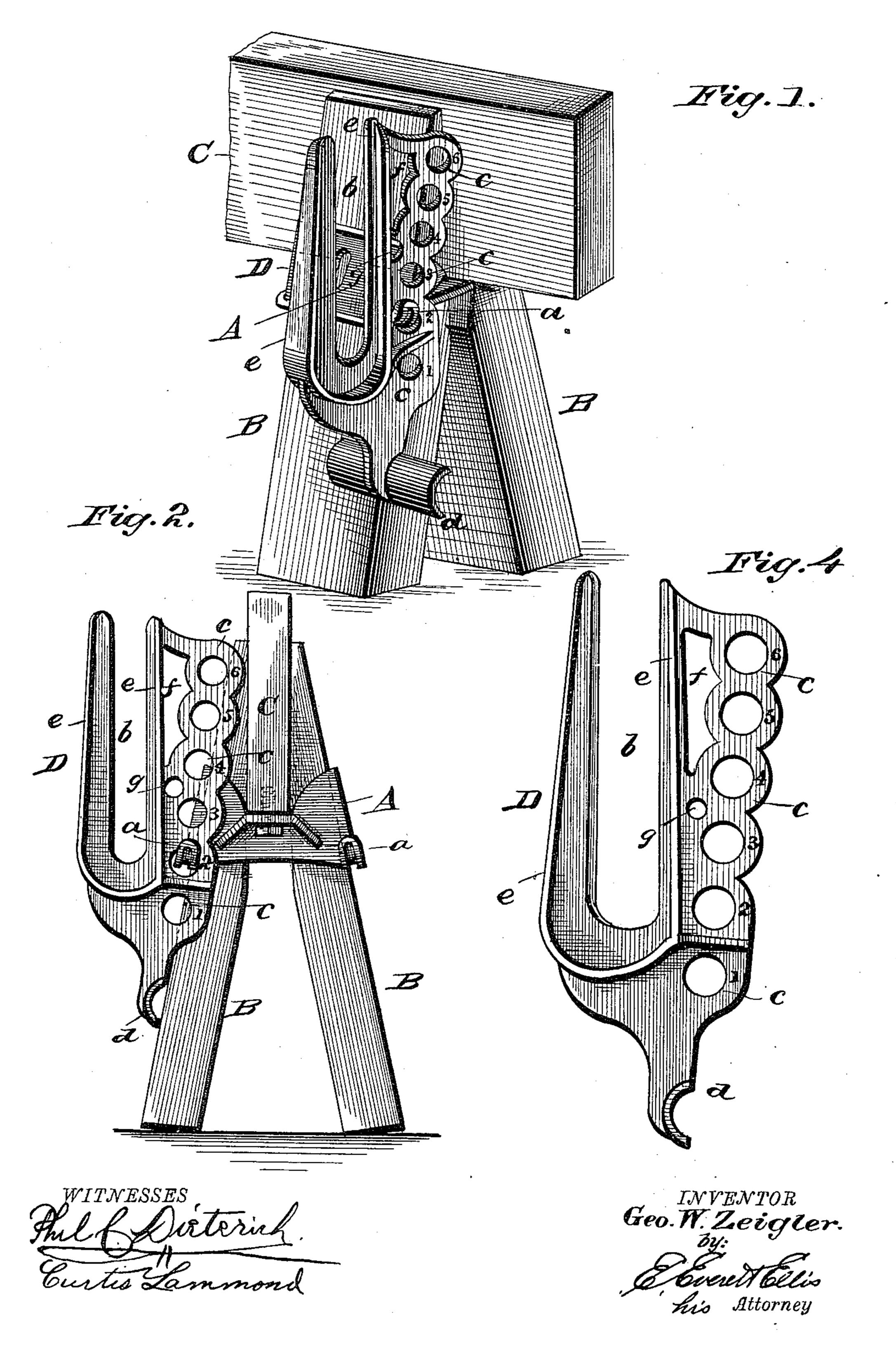
## G. W. ZEIGLER.

TRESTLING OR SCAFFOLDING.

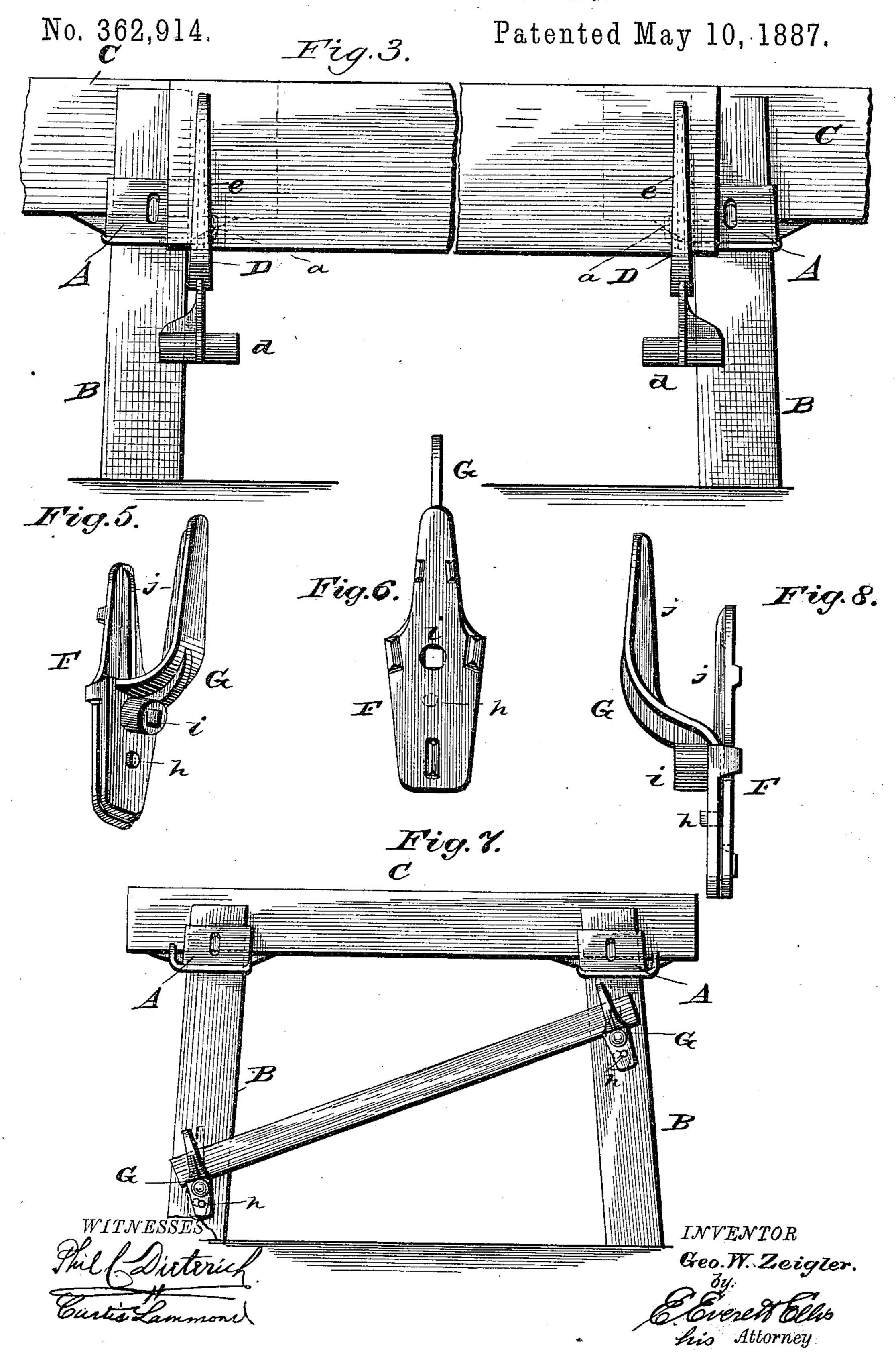
No. 362,914.

Patented May 10, 1887.



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TRESTLING OR SCAFFOLDING.



## United States Patent Office.

GEORGE W. ZEIGLER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## TRESTLING OR SCAFFOLDING.

SPECIFICATION forming part of Letters Patent No. 362,914, dated May 10, 1887.

Application filed February 3, 1887. Serial No. 226,441. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. ZEIGLER, a citizen of the United States, residing at Washington, in the District of Columbia, have in-5 vented certain new and useful Improvements in Trestling or Scaffolding; and I do hereby 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 ap-10 pertains to make and use the same.

This invention relates to certain new and useful improvements in scaffolding or trestling; and it consists, substantially, in the same as constructed, and in such peculiar arrangement 15 and combinations of parts, as will hereinafter be more particularly described, and pointed

out in the claims.

The invention is intended as an improvement upon former patents granted me on the 20 subject and bearing Nos. 318,154 and 327,427, respectively, and is applicable to the clamps covered by either of said patents; but preferably I have selected for illustration the form shown in the one first named. The invention 25 is also applicable to all well-known forms of trestling.

The object of the invention is to enable opposite sets of trestles to be readily connected across a space by the use of boards of almost 3c any width, and always bring the upper edges thereof even or flush with the back of the trestles, so that platform-boards can be placed across for the purpose of enabling plasterers and other classes of mechanics to stand thereon

35 while working.

The invention also has for its object the utilization of the same principle in enabling a simple and secure bracing of such structure at whatever degree of inclination or angle it 40 may be desired; and finally the invention has such other objects in view as will more fully appear from the description hereinafter following, when taken in connection with the accom-

panying drawings, wherein—

Figure 1 is a perspective view of a portion of a trestle having my improvements embodied, and Fig. 2 is an end view thereof. Fig. 3 is a view illustrating the manner of connecting sets of trestles at opposite sides of 50 a space. Fig. 4 is a view showing the form or construction of the present improvement; and Fig. 5 is a view in perspective of a modification thereof as employed for bracing the parts of a scaffold or trestle structure; Fig. 6, a rear

I view of such modification, and Fig. 7 is a view 55 illustrating the manner of its use. Fig. S is a side view thereof.

Before proceeding with a more full description I desire to state that the invention enables several series or sets of trestles to be con- 60 nected or braced by the use of boards of any width commensurate with the sizes of clamp employed without the necessity of cutting or previous fitting thereof, thus enabling old material to be utilized irrespective of widths, 65 and also vastly economizing in time and labor in erecting these structures for the various purposes required.

Reference being had to the several parts by the letters marked thereon, A represents a 70 trestle socket or clamp constructed in accordance with either of my former patents referred to. B represents the legs of the trestle, and C the ledger or back thereof. The said clamp or socket A is in all respects identical in form, 75 with the addition of a hook, a, cast thereon at opposite sides, and for the purpose hereinafter

named.

D represents the attachment or device constituting the present improvements, and con- 80 sists of a malleable iron plate formed with a straight or vertical recess, b, of suitable width, having its opposite edges slightly beveled, as shown, by which to bite into or engage the two sides of a board when forced down into 85 such cavity or recess, and thus prevent it from slipping endwise. This plate is also formed to one side of the recess b with a series of holes or openings, c, which are equally distant from each other—say one inch—and the 90 series extends in an angle of fifteen degrees from a true vertical line, for the purpose hereinafter set forth. The lower extremity or portion of the said plate D terminates with an arm or rest, d, by which, when applied to the 95 socket-clamp for use, a secure bracing will be had against the side of one of the trestle-legs, and thus preserve stability and integrity of the structure. The plate is also provided or formed with ribs e, for the purpose of strength, 100 and the holes or perforations c are preferably numbered consecutively from bottom to top for the purpose of guidance to those by whom they are used, and for lightness the openings f and g are formed. It should be here remarked 105 that while I have set forth a particular construction of this plate, I do not wish to be understood as limiting myself thereto in precise

detail, since various changes could be made therein and still come within the scope of my invention.

The purpose of the series of holes c, arranged 5 as shown, is to permit of adjustability of the plate D in such manner as to conform to the particular widths of boards used to connect the opposite sets of trestles, and always bring the upper edge of such boards flush or even 10 with the upper edge of the back or ledger C, the sides of said boards being maintained perfectly vertical for the reception across their upper edges of the platform-boards E. The holes c, being arranged at an angle to the re-15 cess b, will always maintain the recess truly vertical by reason of the arm d resting or bearing against the trestle-leg, since these legs are usually chamfered or beveled at their upper ends to cause them to spread from the 20 socket A to about a corresponding angle to the series c; hence the effect will be apparent. It is obvious that the degree of angle of these openings c may be varied at pleasure to suit different angles or degrees of pitch of the tres-25 tle-legs. It will be seen, also, that by suspending the plate D on the hook a, through the lower opening, (marked 1,) accommodation will be had for connecting the opposite sets of trestles by boards of six inches width, bringing 3c the upper edge thereof flush with the top of the ledger width, (six inches.) Now, say, for instance, that no boards of this particular width are at hand or can be conveniently obtained, but that others can be had of widths, 35 say, seven or eight inches. All that is necessary to do then is to simply remove the plate and suspend it through the openings 2 or 3, as circumstances may require, and it will thus be seen that they are in like manner brought flush 40 with the ledger. In this way various widths of boards may be used, and old material frequently utilized. By suspending the plate through the top opening, c, (marked 6,) boards twelve inches wide can be used. In practice 45 the arm d rests or bears against the trestle-leg, as shown, thus sustaining pressure and weight and maintaining the plate in proper position relatively.

By referring to the modification shown by 50 Figs. 5 to 8, inclusive, it will be seen that I have provided an auxiliary bracing-plate cast, preferably, of two pieces, FG, each having corresponding biting-edges similar to those of the recess b, and united by a pin, h, formed 55 with F, and passing through a corresponding opening in G. These parts have corresponding holes or openings, i, for the passage of a pin or bolt to secure them to the structure on which used, and it will be seen that they are for each formed or provided with teeth j for biting into the material when attached. These parts are preferably used together; but in some instances the part F may be dispensed with, and it will be seen by reference to the 55 drawings that on changing the position of this device any degree of angle or inclination of the braces may be obtained. I preferably

employ this auxiliary brace F G in connection with the structures in which I employ the plate D; but it is obvious that they are not 70 an essential to the plate in the practice of my present invention.

From the foregoing description it is thought. the construction and operation of the several parts contributing toward my invention will 75 be thoroughly understood, and I desire to state that I do not wish to be limited to the precise arrangement shown and described, since various changes therefrom can be made and still come within the scope of my inven- 80 tion. For instance, it will readily appear that I am not confined to the use of the plate D for the purpose described on trestles that are united by the clamps A, since I can employ the same on the ordinary wooden jointed trestles 85 by means of simple rivets inserted in the legs thereof and still obtain the same result as is accomplished by the present arrangement.

Having thus described my invention, what I claim as new, and desire to secure by Letters 90

Patent, is—

1. In a trestle, the plate D, having a vertical open slot in its upper edge to receive and engage a board, a series of openings along one side arranged at an angle to said slot and in a 95 plane parallel to the slot, whereby it may be supported adjustably, and a transverse bar at its lower portion adapted to bear against a leg of the trestle, substantially as described.

2. In a trestle, the plate D, having a verti- 100 cal open slot in its upper edge whose opposite sides are beveled to bite or take into a board, a series of openings along one side arranged at an angle to said slot and in a plane parallel to the slot, whereby it may be supported ad- 105 justably, and a transverse bar at its lower portion adapted to bear against the trestle-leg, substantially as described.

3. The combination, with sets or series of trestles arranged at opposite sides of a space, 110 the corresponding ones of which are provided with the plates D and connected by boards in the manner described, of the auxiliary bracesupport constructed of the parts F G, united as shown, each having ribs or projections for 115 engaging a board, and provided with an opening for enabling them to be adjustably secured to the trestle-legs, substantially as described.

4. The combination, in a trestle, of the socket or clamp A, having hook a, and unit- 120 ing the legs and back, of a plate formed with an arm to bear against the legs and vertically recessed to receive and engage a board, said plate being adjustable on the hook a, by which boards of varying widths may be used to con- 125 nect opposite trestles and their upper edges brought flush with the backs of such trestles, substantially as described.

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

GEORGE W. ZEIGLER.

Witnesses: E. EVERETT ELLIS, CURTIS LAMMOND.