(No Model.) 2 Sheets—Sheet 1.

G. W. ZEIGLER.

SOCKET CLAMP FOR SCAFFOLDING, &c.

No. 327,427. Patented Sept. 29, 1885.

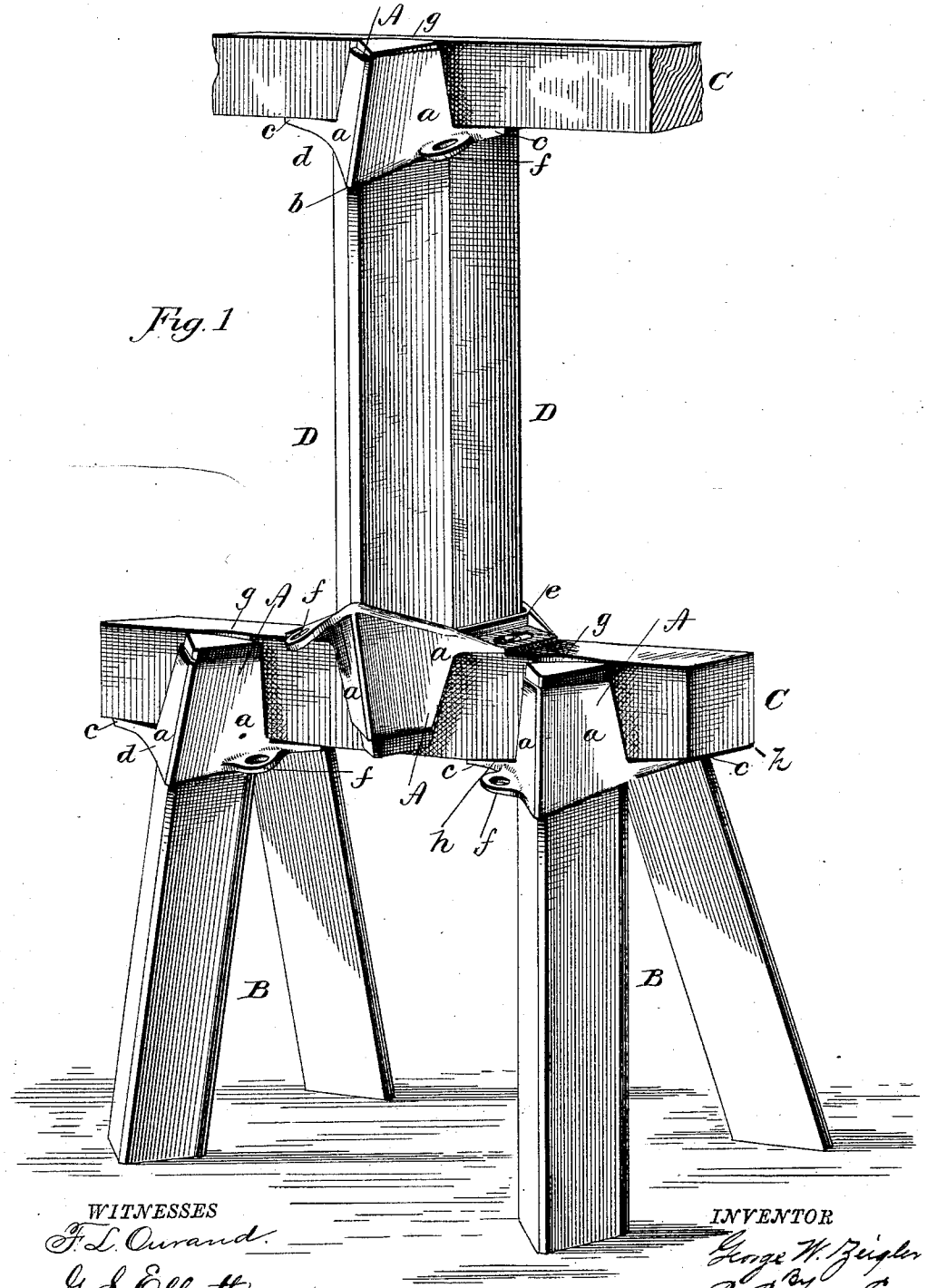


Fig. 1

WITNESSES
F. L. Ourand.
G. S. Elliott.

INVENTOR
George W. Zeigler
By
E. Everett Ellis
his Attorney.

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

(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

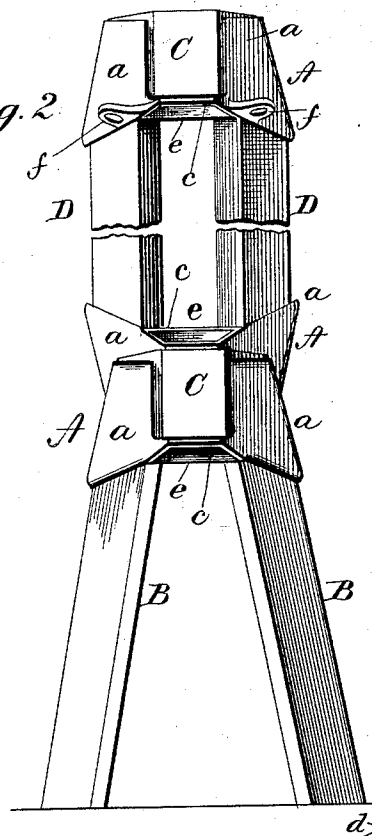


Fig. 3.

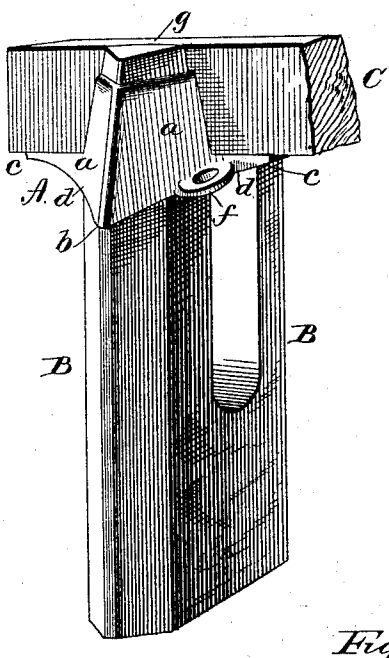


Fig. 4.

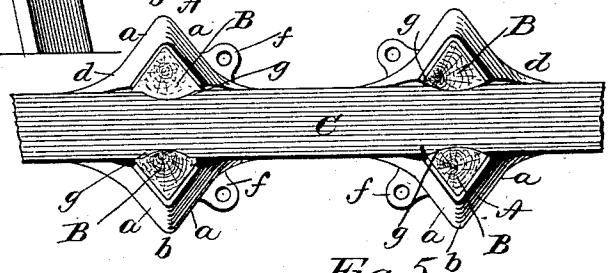
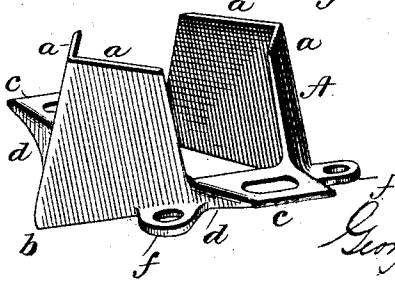


Fig. 5.



WITNESSES

F. L. Ourand.

G. S. Elliott.

George W. Zeigler
INVENTOR

By E. Everett Ellis
his Attorney

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

UNITED STATES PATENT OFFICE.

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

SOCKET-CLAMP FOR SCAFFOLDING, &c.

SPECIFICATION forming part of Letters Patent No. 327,427, dated September 29, 1885.

Application filed August 7, 1885. (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 invented certain new and useful Improvements in Socket-Clamps for Trestling, Scaffolding, and other Purposes; 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 appertains to make and use the same.

My present invention is an improved metal socket and clamp for use in the construction of trestles, scaffolding, and other structures, and is designed more particularly as an improvement upon Letters Patent granted me the 19th day of May, 1885, the same bearing No. 318,154.

The general objects of the invention are similar to those of the Letters Patent referred to; but the present invention involves several features of construction by which such objects are attained in a superior manner, it being, however, tributary to or dependent upon the principle comprised by the first, yet capable of serving many additional functions.

The invention consists, substantially, in the parts as constructed and in such other details as will hereinafter be distinctly described, and pointed out in the claims.

Referring to the accompanying sheets of drawings, Figure 1 represents a perspective view of trestling or scaffolding in which my improvements are embodied. Fig. 2 represents an end elevation in which my improvements are also embodied. Fig. 3 represents a perspective view of a modified form of support; Fig. 4, a top or plan view; and Fig. 5 represents a view of the socket-clamp in perspective.

By referring to the Patent No. 318,154, hereinbefore mentioned, it will be observed that the socket or clamp is constructed of two flat and tapering inclined or convergent sides that form the means by which the legs or supports are received and held. The principal distinction in the present instance is that the sides of the clamp are so formed or constituted as to present a right angle in transverse section, by which, in addition to other features of change hereinafter named, the desired results are obtained. I desire to state, further, that under certain conditions it may be desirable to form the sides of various configurations in cross-section, such as semicircular or, perhaps, of irregular design; and I do not wish to be limited to the form herein shown.

Reference being had to the several parts by the letters marked thereon, A represents as a whole a socket-clamp in which my invention is embodied, and B B designate the legs or supports, these latter being of contour preferably as shown, to conform to the construction of the clamp proper, their opposing sides being beveled or chamfered to give them the requisite degree of pitch or inclination.

C represents the ledger or cross beam, and D D designate risers by which a scaffold or other structure may be "run up" or built any height desired.

Returning to the socket-clamp, I will proceed to describe its construction in detail.

a a designate the two planes forming each side, which unite with each other at right angles, each tapering, and the two being convergent or slightly inclined toward each other at the top. At their point of juncture at the bottom they terminate in a point, as shown at *b*, by which increased strength of resistance is afforded to outward strain due to weight imposed upon the supporting-legs. The planes forming the angle of the sides extend out to the ends of the lateral ledger-supports *c*, as shown at *d*, making a slight curvature, as shown, to avoid abrupt angles in the formation. The ledger or tie-beam supports *c* branch outward at right angles to the main sides, leaving an open or free space between, by which the ends of the legs may enter the angle formed in each of the sides to embrace the ledger.

A strengthening-rib, *e*, extends crosswise or transversely of the socket for a like purpose as the webs *c* in my former patent referred to.

Preferably at one or more of the curved points *d* is formed a projecting lug, *f*, having a perforation by which a strengthening rod or brace may be employed to connect two or more trestles, or by which articles such as a hammock or the like may be suspended thereto.

The legs B are beveled at their upper ends, as is understood, and the ledger or tie beam

is slightly grooved or hollowed out at each of its sides adjacent to the ends of the legs, as at *g*, into which grooves the latter are partially received, thus preventing any possible sagging or dislodgment of parts from strain endwise of the beam.

To attach or erect the risers upon the beam, the clamp is simply inserted, and the risers then inserted having their outer sides beveled in order to cause them to assume a vertical position, as shown. In this way the scaffolding may be run up or erected any height required.

In Fig. 3 I have shown a modified form of leg or support, the same being obtained by mortising out a single piece of timber a sufficient distance from the end to give the two ends thus formed an elasticity or springiness by which, when beveled off and placed within the socket, they will be tightly confined therein. This form of construction, however, is intended more particularly for the risers, and in this connection it will readily be seen how a single piece can be made to perform the functions of two.

In order to give the legs an inclination or pitch in the direction of length of the beam or ledger, I simply bevel the under side of the latter to the extent required, as indicated between the letters *h h*, Fig. 1, gaining this result without any alteration of the legs or any change in the clamp.

My invention, it is thought, will be thoroughly understood from the foregoing; but I desire to add that there are many material changes which could be made in the construction of the several parts which would come within the scope of my invention.

Having thus described my invention, what I claim is—

1. In a trestle or scaffold, a clamp consisting of two sockets, each formed of two sides, which are right angled in cross-section, and having lateral supports extending therefrom, substantially as described.

2. In a trestle or scaffold, a socket-clamp formed in one piece and consisting of two tapering and convergent right-angled sides having lateral supports extending therefrom, substantially as described.

3. In a trestle or scaffold, a socket-clamp formed of two pairs of tapering and convergent sides having lateral ledger-supports, each side being right angled in cross-section, and terminating in a point where they intersect at the bottom, and thence extending outward to the ends of said supports, substantially as described.

4. In a trestle or scaffold, a socket-clamp formed of two right-angled sides having lateral supports, as described, and having the perforated lugs and transverse strengthening-ribs, substantially as and for the purpose set forth.

5. The combination, with the socket-clamp, constructed substantially as described, of the legs or risers conforming to the contour of the clamp, and the ledger or beam formed with grooves in its sides adjacent to said legs or risers, substantially as shown, and for the purpose set forth.

6. The combination, with the socket-clamp, constructed substantially as described, of the ledger or beam and the legs or risers formed of a single piece mortised a suitable distance from its ends, and having the portions thus formed beveled or chamfered, substantially as specified.

7. The combination, with the socket-clamp, constructed substantially as described, of the legs or supports having beveled sides or edges, and the ledger grooved at points adjacent to such legs, and having its under side beveled or chamfered, substantially as and for the purpose specified.

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

GEORGE W. ZEIGLER.

Witnesses:
E. EVERETT ELLIS,
MAX LUCHS.