

(No Model.)

2 Sheets—Sheet 1.

L. STOWE.

COMBINED FRAME BRACE AND STAKE SOCKET.

No. 601,912.

Patented Apr. 5, 1898.

Fig. 1.

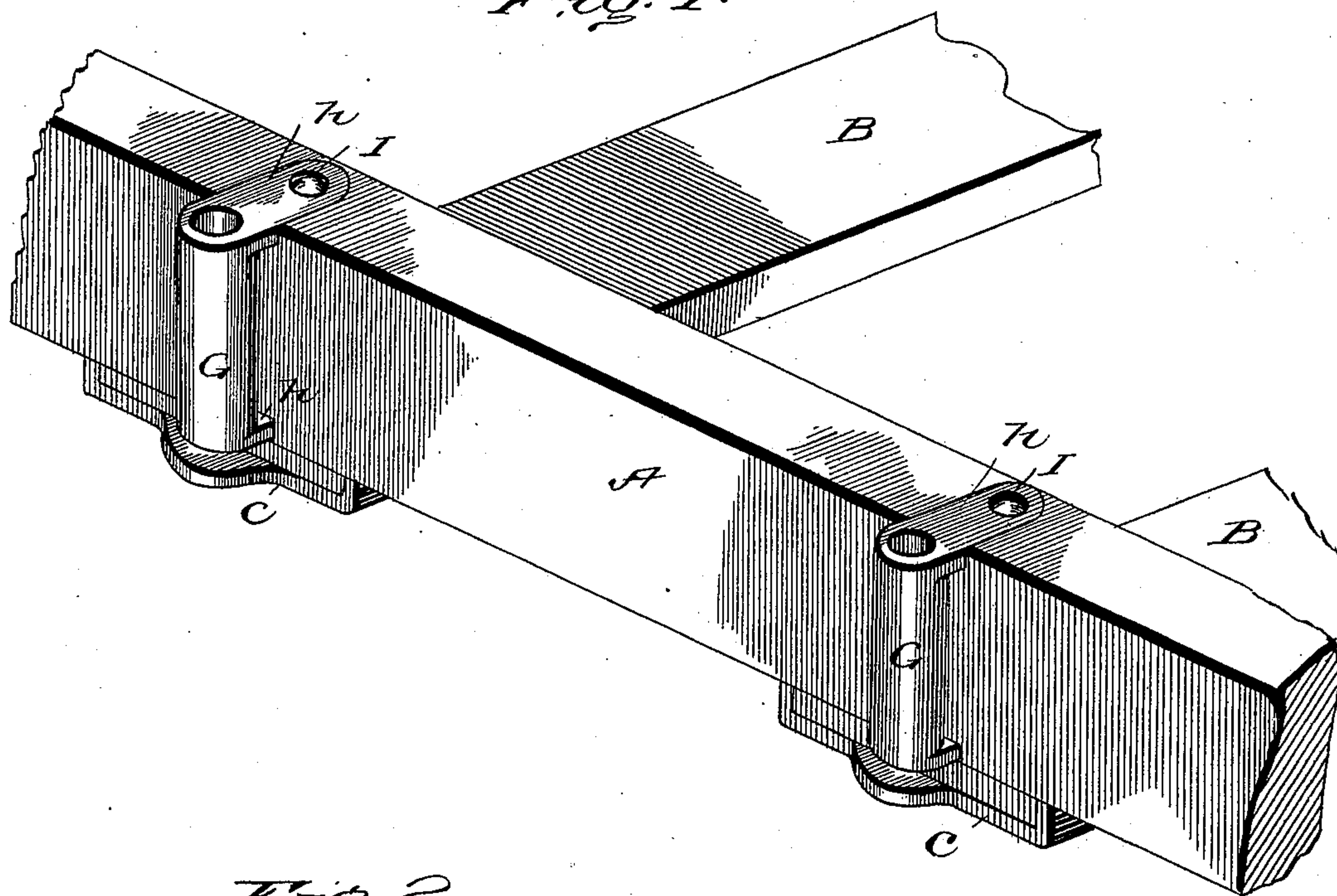


Fig. 2.

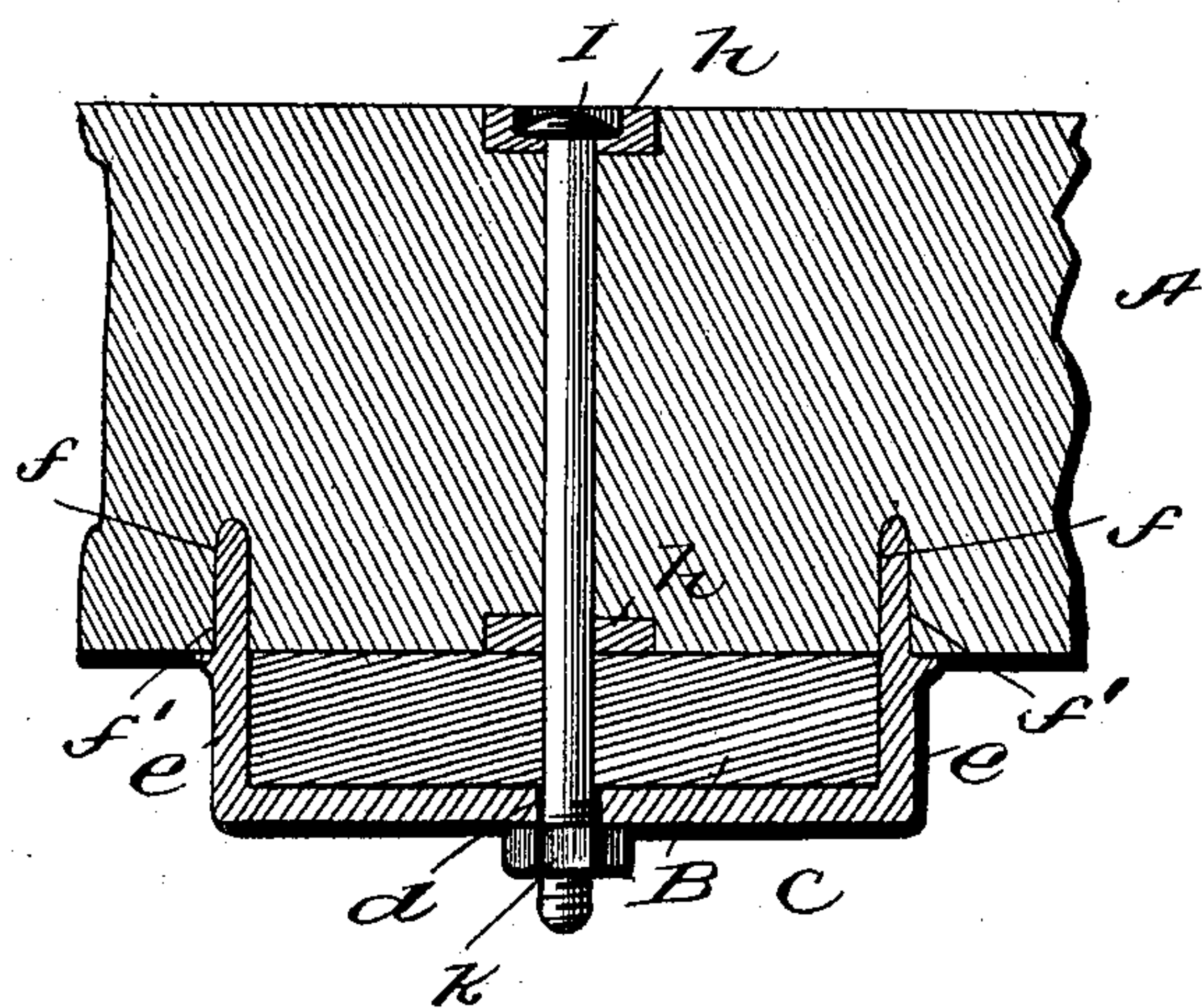
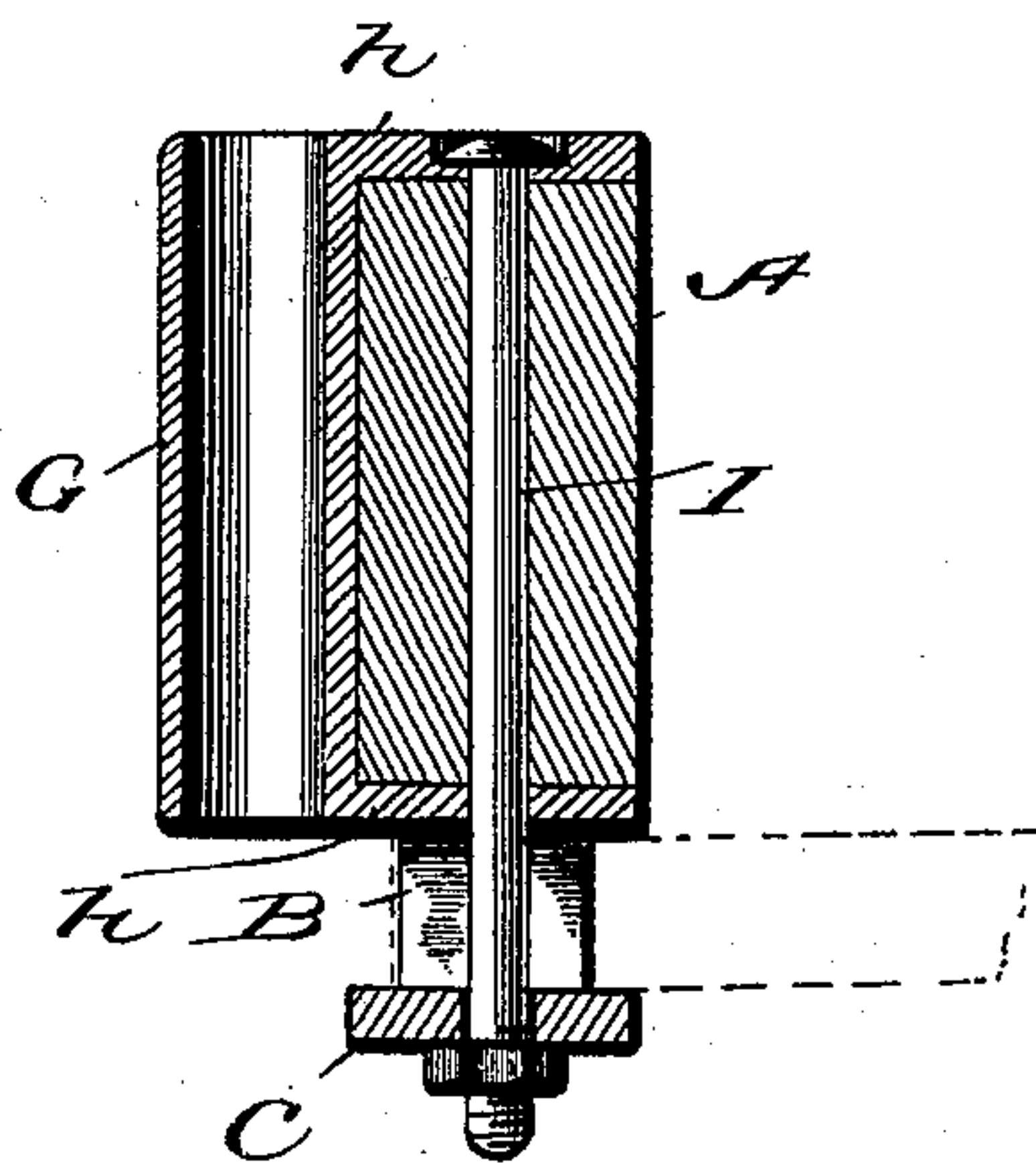


Fig. 3.



Witnesses

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(No Model.)

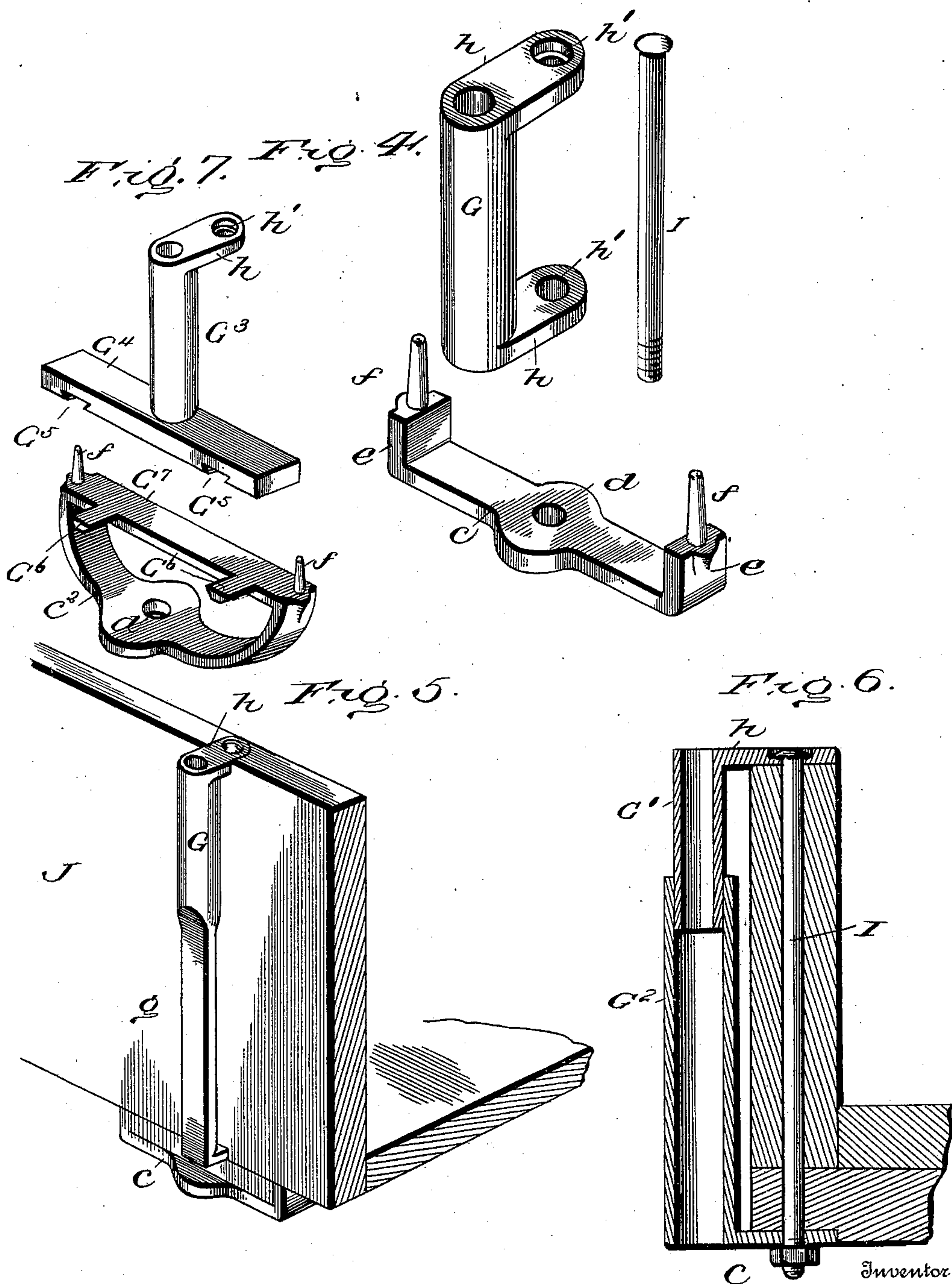
2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

LORENZO STOWE, OF CHATTANOOGA, TENNESSEE.

COMBINED FRAME-BRACE AND STAKE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 601,912, dated April 5, 1898.

Application filed December 13, 1897. Serial No. 661,703. (No model.)

To all whom it may concern:

Be it known that I, LORENZO STOWE, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in a Combined Frame-Brace and Stake-Socket for Wagons; 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.

This invention relates to a combined frame-brace and stake-socket for wagons; and it has for its object, primarily, to provide a novel stake-holder to support the side-boards of platform-wagons or additional side-boards on bed or body wagons.

A further object is to provide a novel brace and stake-support combined for uniting the side and cross pieces of the frame and obviating the necessity of mortising and tenoning the same and for strengthening and cheapening the cost of construction of the frame.

To the accomplishment of these ends the invention consists in a frame-brace and stake-socket embodying certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of portion of a platform-wagon frame embodying my invention. Fig. 2 is a vertical longitudinal section of the side beam and brace and stake-socket. Fig. 3 is a vertical transverse section of same; Fig. 4, a perspective view of the brace and stake-socket detached; Fig. 5, a perspective view showing the device as adapted for use on solid-body wagons; Fig. 6, a vertical transverse section showing a modified construction of brace and stake-socket, and Fig. 7 a detached perspective view showing a further modified construction of same.

Referring now to Figs. 1 to 5 of the drawings, A represents the side sill or beam, and B the cross-pieces, of a platform-wagon frame such as is ordinarily employed in hauling lumber, dirt, &c. In this class of wagons the side-boards are usually detachably supported by stakes fitted in sockets on the side sills and a bottom formed when desired, as when

hauling dirt, by boards laid upon the cross-pieces. The side sills and cross-pieces are also ordinarily mortised and tenoned and fastened by means of bolts, pins, or wedges. My invention contemplates the provision of a brace-clamp and stake-socket combined which serves the double function of a fastening device to secure said sills and cross-pieces together, whereby mortising and tenoning may be dispensed with, if desired, and the construction of the frame thereby cheapened, and a holder to receive the stakes which support the side-boards. The sills and cross-bars may, however, be mortised and tenoned, if deemed desirable, but fastened by my improved brace-clamp and socket instead of the usual bolts, pins, or wedges before referred to. A staunch and rigid frame will thereby be secured.

In carrying my invention into practice I provide a clamping-plate C, which supports the end of the cross-piece and clamps the same against the underside of the side beam. This plate is formed with a central bolt-hole *d* and with end flanges *e*, which engage the sides of the cross-piece, said flanges having lugs or projections *f*, adapted to enter recesses *f'* in the under side of said side beam, as shown in Fig. 2, to firmly hold the plate against longitudinal sliding or lateral movement. The end of the cross-piece is thereby supported and securely braced to resist pulling and twisting strains. The tubular stake-socket G extends vertically on the outside of the beam and is provided with end flanges *h*, which lap over upon the top and bottom of the beam, said flanges being formed with bolt-holes *h'*. The parts are all rigidly united by a bolt I, passing downward through the beam, cross-pieces, and bolt-holes *d h'* of the socket and clamp and provided with a retaining-nut *k*, threaded onto its lower end, as shown in Figs. 2 and 3. The top and bottom surfaces of the beam are preferably recessed to receive the socket-flanges *h* and the bolt-hole of the upper flange countersunk to receive the head of the bolt in order that the attached side-board and cross-pieces may fit closely against the same.

In the embodiment of the invention shown in Fig. 5 the construction is substantially the same, such changes only in the proportions

of the parts being made as to adapt it for use upon a solid-body wagon on which it is desired to employ additional side-boards. To this end the socket member is lengthened and
 5 provided with a flat shank *g*, formed integrally with its upper tubular stake-receiving portion *G*. The flanges *h* in this instance lap over upon the top and bottom edges of the side-board *J*, and the bolt passes through said
 10 side-board.

In the modification shown in Fig. 6 the socket is constructed in two tubular sections *G*¹ *G*², which fit and slide one within the other telescope fashion. This construction permits of
 15 the parts being adjusted to compensate for swelling or shrinkage of the side beam or board.

In the modification shown in Fig. 7 the socket *G*³ is formed with a base-plate *G*⁴, having transverse beveled or dovetailed recesses *G*⁵. The clamping-plate *C*² is curved and provided with a cross-bar *G*⁷, formed with laterally-projecting lugs or tenons *G*⁶, which are also beveled or dovetailed to fit into the said
 20 recesses *G*⁵. The operation with this construction will be readily understood.

From the above description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of the invention will be readily understood.
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One important advantage of my present invention resides in the fact that the parts of the frame may be quickly assembled and a frame of great strength and rigidity produced from lighter timber than that ordinarily employed.
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Having thus fully described my invention, what I claim as new and useful, and desire to
 40 secure by Letters Patent, is—

1. A wagon-brace and stake-socket consisting of a clamping member adapted to support and clamp the cross-piece to the side sill or side-board of the wagon-frame, a stake-socket
 45 member, and a bolt adapted to connect said members together and to the side sill or side-board, substantially as described.

2. A wagon-brace and stake-socket, consisting of a clamping-plate provided with parallel end flanges, a socket member having flanges, 50 and a bolt adapted to be passed through the flanges on the socket member and body of the clamping-plate, substantially as described.

3. A wagon-brace and stake-socket, consisting of a clamping-plate provided with parallel 55 end flanges formed with spurs or projections, a socket member having flanges, and a bolt adapted to be passed through the flanges on the socket member and body of the clamping-plate, substantially as described. 60

4. A wagon-brace and stake-socket, consisting of a clamping-plate provided with a bolt-hole and parallel end flanges having lugs or projections, a vertical socket member provided with top and bottom flanges having 65 aligned bolt-holes, and a bolt adapted to be passed through the said holes in the socket-flanges and clamping-plate, substantially as described.

5. A wagon-brace and stake-socket, consisting of a cross-piece clamp provided with parallel end flanges each having a lug or projection, a socket member, and a bolt adapted to connect the said clamp and socket member. 70

6. In a wagon, the combination with a side 75 sill or board and bottom cross-piece, of a clamping-plate supporting the end of the cross-piece and provided with end flanges engaging the side edges of said cross-piece and having lugs or projections entering recesses in the under 80 side of the side sill or board, a vertical socket member on the exterior of said sill or board and provided with flanges lapping over upon the top and bottom edges of the same, and a bolt extending through the side sill or board, 85 socket-flanges and body of the clamping-plate and connecting said parts together, substantially as described.

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

LORENZO STOWE.

Witnesses:

A. A. STONG,
 F. F. RALPH.