(No Model.) 2 Sheets—Sheet 1.

A. SOMMERFELD.

SUPPORTING STAND.

No. 559,415. Patented May 5, 1896.

Fig. 1.

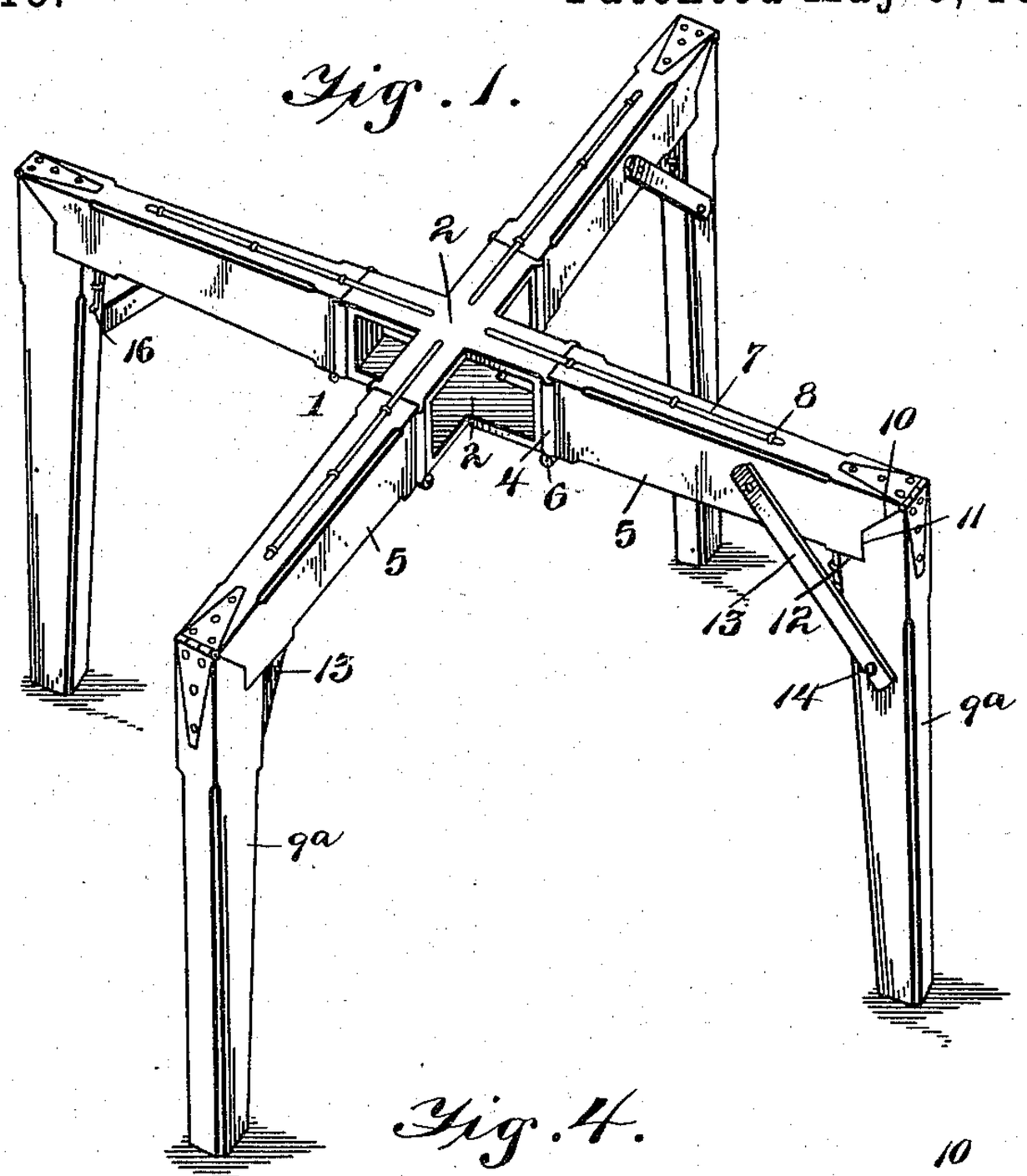

Fig. 4.

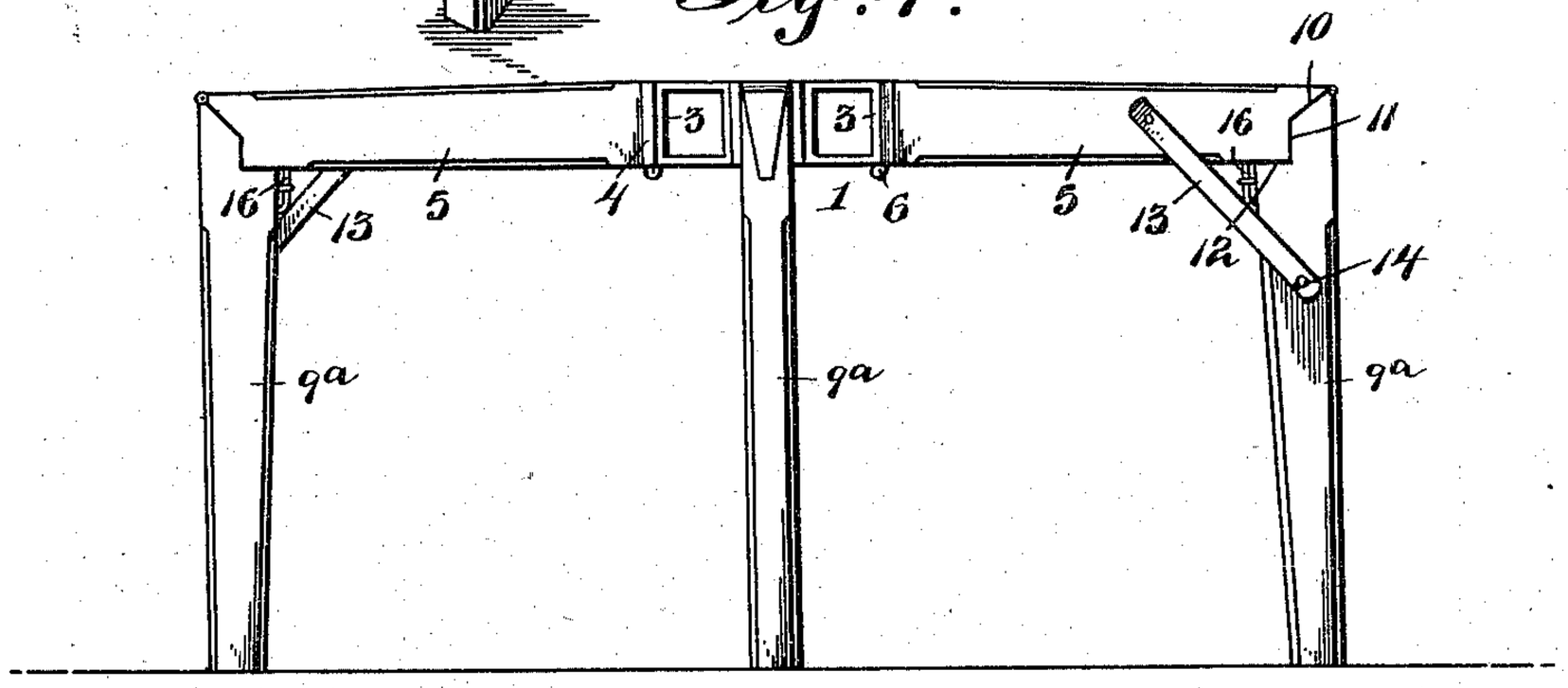

Fig. 9.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 8.

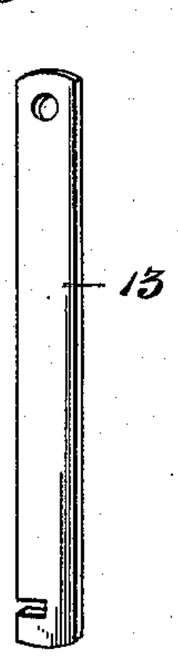
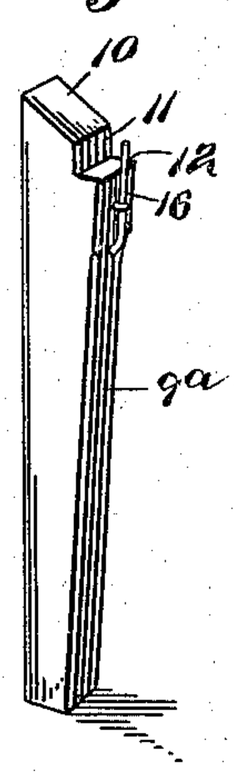


Fig. 7.



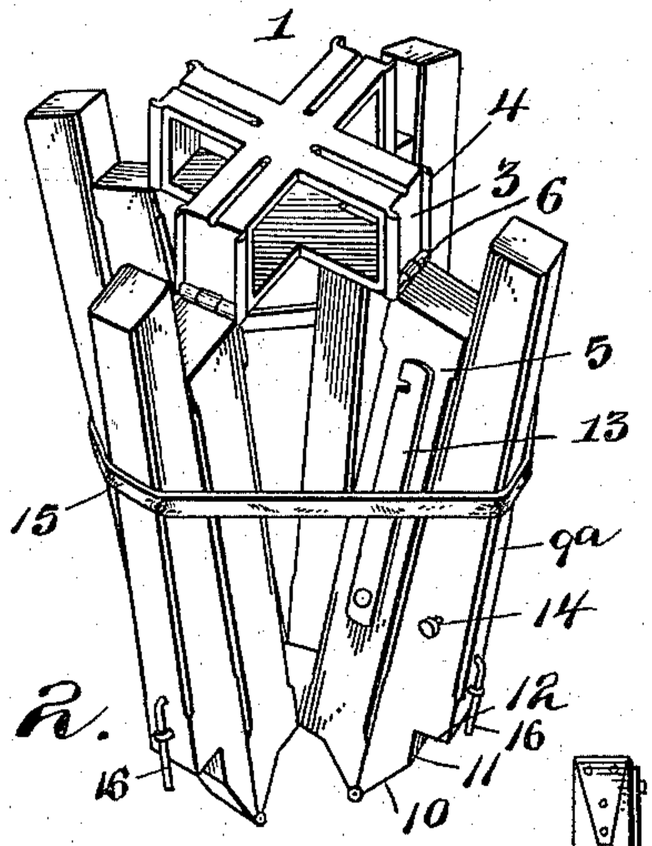


Fig. 2.

Fig. 3.

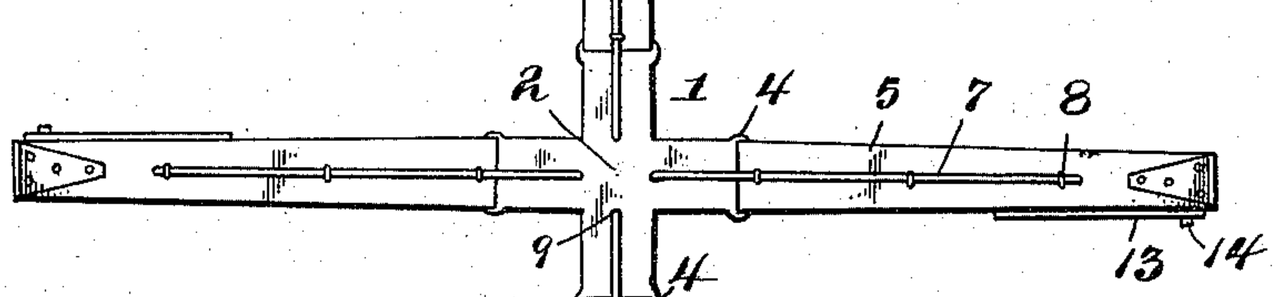


Fig. 5.

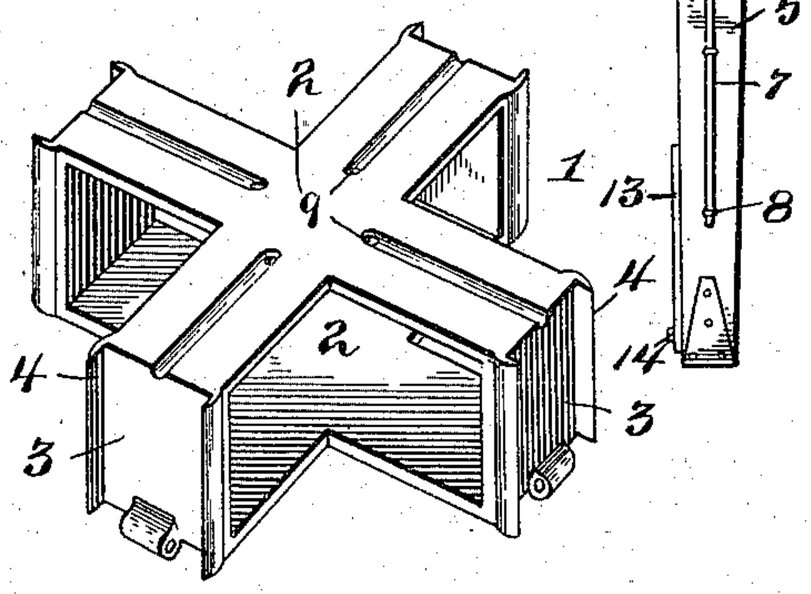
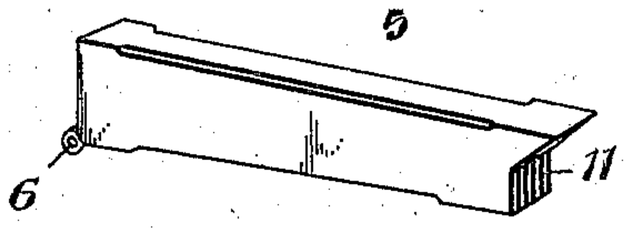


Fig. 6.



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UNITED STATES PATENT OFFICE.

AUGUST SOMMERFELD, OF HERMANN, MISSOURI.

SUPPORTING-STAND.

SPECIFICATION forming part of Letters Patent No. 559,415, dated May 5, 1896.

Application filed February 3, 1896. Serial No. 577,867. (No model.)

To all whom it may concern:

Be it known that I, AUGUST SOMMERFELD, a citizen of the United States, residing at Hermann, in the county of Gasconade and State of Missouri, have invented a new and useful Supporting-Stand, of which the following is a specification.

This invention relates to supporting stands or trestles; and the object in view is to obtain a strong, rigid, and durable stand or trestle which is adapted to support a barrel or vessel at such an elevation as to adapt the contents thereof to be conveniently withdrawn or to support any other object of considerable weight in a position for affording convenient access thereto, the said stand when not in use being capable of being folded up into compact shape for storage or transportation.

A further object of the invention is to construct the said stand in such manner that it may be lowered at one side or canted to receive the object to be placed thereon, whereby such object may be deposited upon the stand by a single attendant.

Other objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a supporting-stand constructed in accordance with this invention, the same being set up into position for use. Fig. 2 is a similar view showing the same folded for transportation. Fig. 3 is a plan view of the stand in position for use. Fig. 4 shows the stand in side elevation. Fig. 5 is an enlarged detail perspective view of the centerpiece. Fig. 6 is a similar view of one of the horizontal arms or bars. Fig. 7 is a similar view of one of the legs or standards. Figs. 8 and 9 are detail views of the leg-brace and locking-spring employed for retaining the stand in its operative position.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates the center piece of the supporting-stand, which is constructed of metal and formed, preferably, by casting the same in a single piece. This center piece may be said to constitute twin upper and lower portions, made in the form of the letter X, or provided with intersecting crossed portions, as indicated at 2. These upper and lower portions are spaced a suitable distance apart for affording a wide vertical bearing for the main horizontal arms or bars of the stand, hereinafter referred to, and are connected rigidly by means of vertical webs 3, which join the extremities of the crossed bars of said upper and lower portions 2, as clearly shown in Fig. 5. An open one-piece frame is thus formed which is light and at the same time rigid. Each arm of this center piece 1 is provided, as to its vertical web portions 3, with vertically-extending ribs or flanges 4, arranged in parallelism, the said ribs being adapted to receive between them the inner end of its respective horizontal arm or bar, (indicated at 5.) There being four arms to the center piece 1 the same number of horizontal arms or bars 5 are employed, and each has its inner end, when in position for use, inserted between said ribs or flanges 4. Each horizontal arm or bar 5 is also hinged at its lower inner corner to its respective arm of the center piece, and at the lower corner thereof, as indicated at 6. In addition to the arms 5 being hinged at their lower corners to the center piece and received at their inner ends between the ribs or flanges 4 each of said arms 5 carries a spring-catch 7, the outer end of which is embedded in a groove in the arm or bar 5, and has its outer extremity bent at an angle and driven into said arm 5, which is preferably of wood, and said spring-catch is also secured by means of staples or other fastenings 8. The inner end of the spring-catch projects beyond the corresponding end of the arm or bar 5, and is adapted to enter a groove in the upper surface of the center piece, which is flush with the upper surface of the arm or bar 5. The inner extremity of the spring-catch 7 is deflected substantially at right angles, and when in the position shown in Fig. 1 enters a socket 9, formed therefor in the center piece 5. The spring-catch 7 thus serves to lock its respec-

tive bar in rigid relation to the center piece, and the number of these catches corresponds to the number of the arms or bars 5.

Each horizontal bar 5 has hingedly connected to its outer extremity a leg or standard 9^a. The hinge by which such parts are connected is located at the other upper corner, so that the outside edge of the leg may be folded against the upper edge or surface of its respective horizontal bar, as in Fig. 2. The joint between each bar 5 and its leg or standard 9^a is partially a miter-joint, as indicated at 10. The joint also comprises vertical abutting shoulders 11 and a horizontal shoulder 12, upon which the outer extremity of the horizontal bar receives firm support. Each leg is held perpendicularly to its respective horizontal bar by means of a diagonal brace 13, of metal, pivotally connected at one end to either the leg or its horizontal bar and having at its opposite end a slot adapted to be brought into engagement with a pin 14, projecting laterally from the other part. By unhooking the braces 13 and releasing the spring-catches 7 the horizontal bars may be folded together, and thereafter the legs or standards may be folded against the horizontal bars, and finally a strap or other suitable tie 15 may be passed around the same, as shown in Fig. 2, after which the folded stand may be readily carried from place to place or stored away in small space.

The supporting-stand hereinabove described may be used for any purpose where it is desired to support an object of any nature at an elevation from the floor or ground. In order to enable the object to be deposited upon the stand, two adjacent legs or standards may be released, so that the stand may be inclined to one side until the extremities of the horizontal bars rest upon the ground or floor. The object may now be manipulated by hand or with the aid of a bar until it is seated upon the top of the stand while in such inclined position, after which the bars 5 may be lifted until they reassume their horizontal position, when the legs or standards may be adjusted and braced, as described. The horizontal bars and the legs or standards are preferably composed of wood; but where extraordinary strength is required it is of course within the scope of this invention to make said parts of metal or any desired material. The particular manner of joining the horizontal bars to the center piece and the legs or standards to the horizontal bars results in producing an extremely-rigid and a thoroughly-braced stand having just as great supporting power as if it were made without joints and not adapted to be folded. If desired, each of the legs or standards may be provided upon its inside with a pin 16, which when in its operative position enters a corresponding socket in the extremity of its respective horizontal bar, thus rendering the connection between said parts still more secure and rigid. Any form of strap or tie 13 may be employed in lieu of that shown, and it may be applied at any desired point where it will hold the folded stand in compact shape.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

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

1. A supporting-stand, comprising a center piece, a series of arms or bars radiating therefrom and connected thereto pivotally, at their lower inner corners, and a corresponding series of legs or standards hingedly connected to the outer ends thereof, all arranged and adapted to be folded, substantially in the manner and for the purpose described.

2. A supporting-stand, comprising a common center piece, a series of horizontal bars hingedly connected at their inner ends thereto and each carrying a spring-catch adapted to engage the center piece and hold the bars in rigid relation thereto, and a corresponding series of standards hinged to the outer ends of said bars and held in rigid relation thereto by means of suitable braces, substantially as described.

3. A supporting-stand, comprising a common center piece having radiating portions and provided as to each of said portions with vertical parallel spaced ribs, a series of horizontal bars hinged to said center piece and having their inner ends received between and braced by said ribs, and a corresponding series of standards hinged to the outer ends of said arms and braced in relation thereto, substantially as described.

4. A supporting-stand, comprising a common center piece formed of metal and consisting of upper and lower portions spaced apart and having radiating arms, the arms of one portion being located in alinement with the arms of the other portion and connected therewith by means of webs at the extremity thereof, horizontal bars corresponding in number to the radial arms of the center piece and having a hinged and abutting relation thereto, and a corresponding series of standards jointed to the outer ends of said bars, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AUGUST SOMMERFELD.

Witnesses:

CHARLES M. HEBERLE,

HENRY OCHSNER.