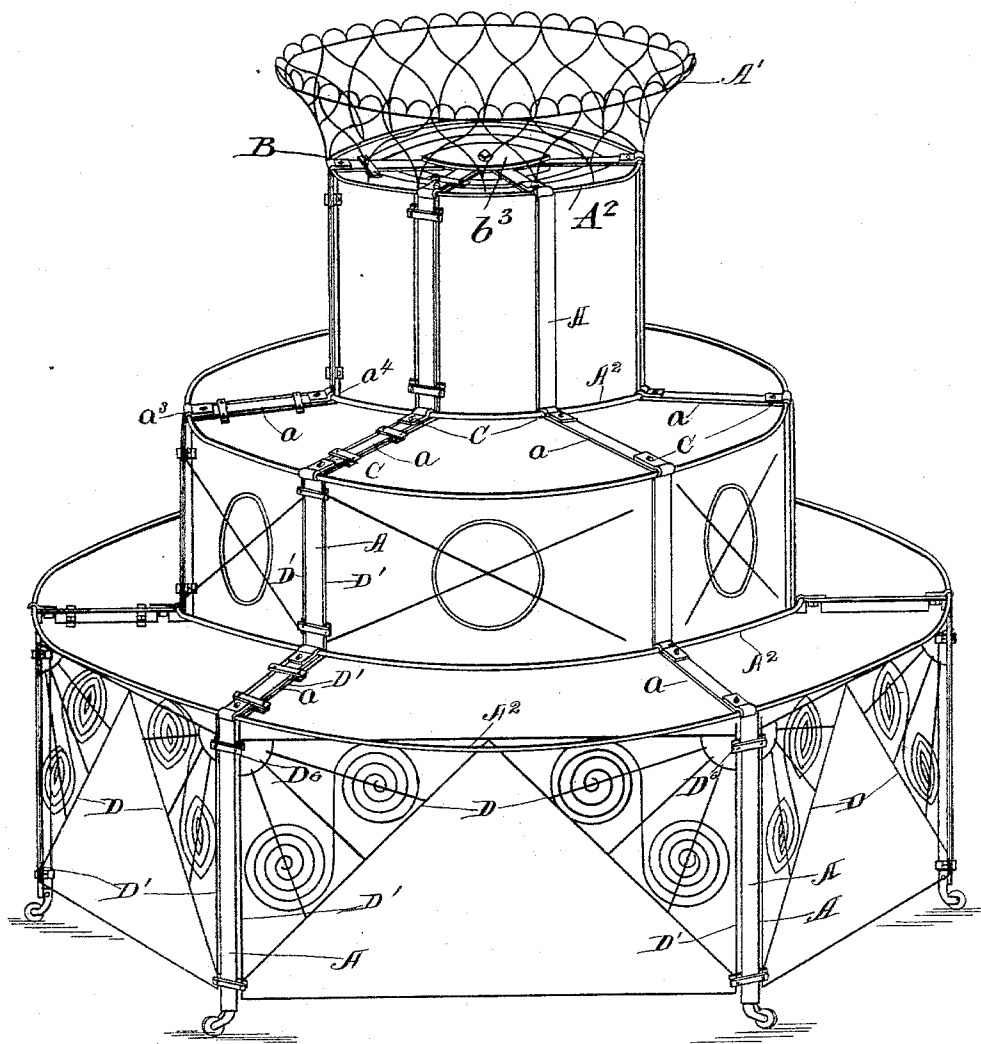


L. G. BEERS & H. EBERHARDT.
FASTENING FOR IRON AND ORNAMENTAL WIREWORK STANDS.
No. 584,069. Patented June 8, 1897.

Fig. 1.



Witnesses:

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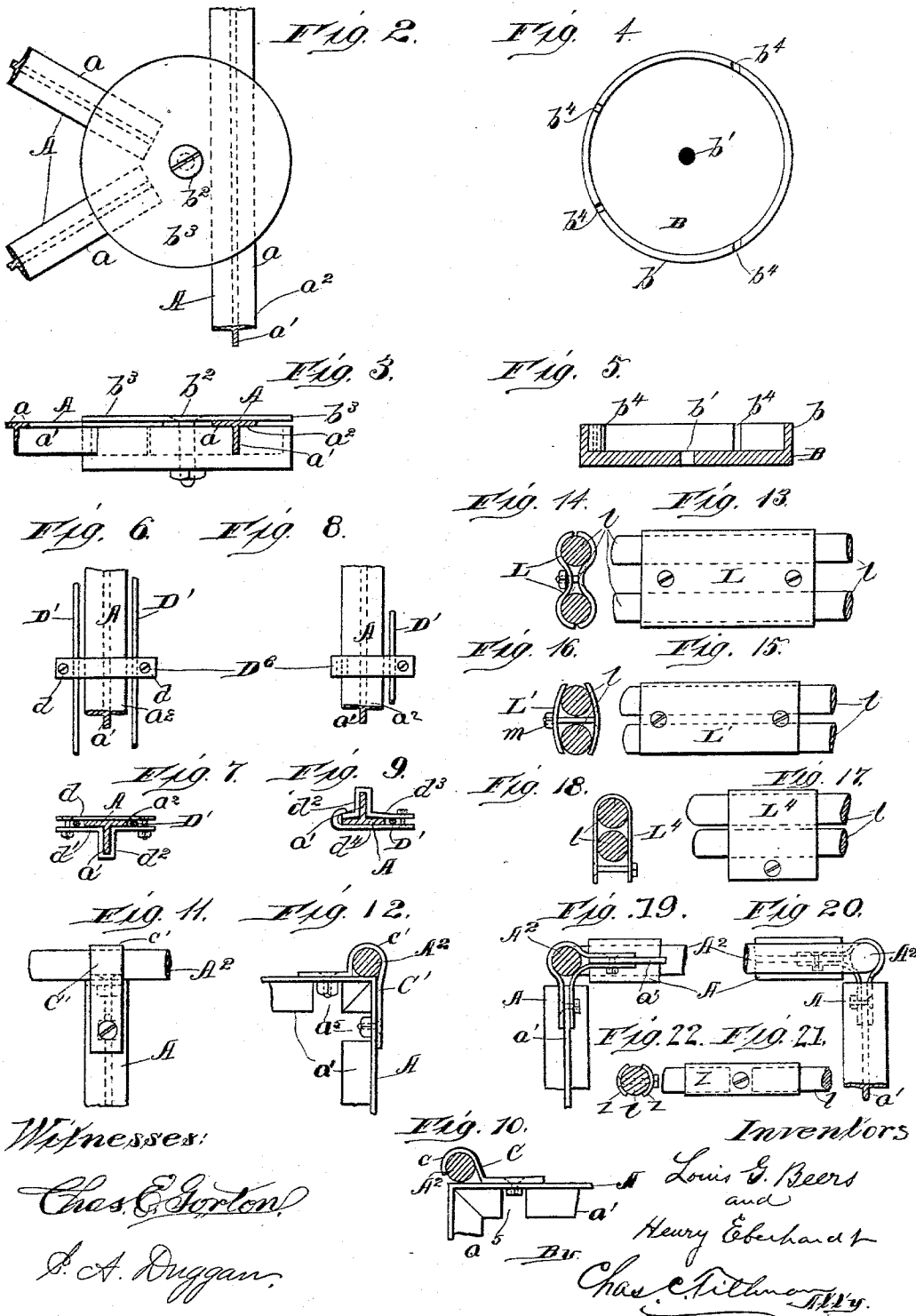
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UNITED STATES PATENT OFFICE.

LOUIS G. BEERS AND HENRY EBERHARDT, OF CHICAGO, ILLINOIS, ASSIGN-
ORS, BY DIRECT AND MESNE ASSIGNMENTS, TO THE GILBERT & BENNETT
MANUFACTURING COMPANY, OF GEORGETOWN, CONNECTICUT.

FASTENING FOR IRON AND ORNAMENTAL WIREWORK STANDS.

SPECIFICATION forming part of Letters Patent No. 584,069, dated June 8, 1897.

Application filed May 8, 1893. Serial No. 473,364. (No model.)

To all whom it may concern:

Be it known that we, LOUIS G. BEERS and HENRY EBERHARDT, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fastenings for Iron and Ornamental Wirework

Stands, of which the following is a specification. This invention relates to improvements in the manner of securing the various parts of iron and wirework stands and like constructions together; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the parts of the fastenings therefor, as will be hereinafter more fully set forth, and specifically claimed.

The object of our invention is to furnish a simple and inexpensive means of securing the above-named devices together in a strong and durable manner which shall be easily applied to various forms of construction and also to dispense with the small wire fastenings used in lacing or securing the baskets or flower-pot receptacles to the frames, thus avoiding displacement thereof on account of rust and wear.

In order to enable others skilled in the art to which our invention pertains to make and use the same, we will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of a flower-stand, showing our fastenings applied thereto, with all of the baskets or trays but one for the reception of the flower-pots removed therefrom in order to display the fastenings. Fig. 2 is a plan view of the top fastening and a portion of the supporting legs or bars. Fig. 3 is a side view thereof. Fig. 4 is a plan view of a portion of the upper fastening for the flower-stand with its top removed. Fig. 5 is a sectional view thereof. Fig. 6 is a front or face view of a portion of one of the supporting bars or legs, showing the manner of securing the ornamental wirework thereto. Fig. 7 is a cross-sectional view thereof. Fig. 8 is a modification of Fig. 6, and Fig. 9 is a cross-sectional view thereof. Fig. 10 is a side view, partly in section, of a portion of one of

the supporting bars or legs and a connecting-rod, illustrating the manner of securing the two together. Fig. 11 is a face view of a portion of one of the supporting-legs and a connecting-rod, illustrating a modification in the manner of securing the two together; and Fig. 12 is a side view, partly in section, thereof. Fig. 13 is a face view of two parallel rods and their fastening. Fig. 14 is a cross-sectional view thereof. Fig. 15 is a face view of a modification of Fig. 13, and Fig. 16 is a cross-sectional view of the same. Fig. 17 is a face view of still another modification in the manner of securing two bars parallel with each other, and Fig. 18 is a cross-sectional view thereof. Fig. 19 is a detail showing a rod in cross-section, a portion of an upright piece, a portion of a horizontal piece, both these pieces being of T-iron with their flanges in a single plane, and the view illustrates a slightly-modified form of the strap for connecting such members. Fig. 20 is a similar view taken from the opposite side. Fig. 21 is a side view of a clamp and a portion of two rods, showing the method of securing the same together; and Fig. 22 is a cross-section thereof.

Similar letters refer to like parts throughout the different views of the drawings.

Flower-stands and other constructions of a like nature, made of iron and ornamental wirework with their parts rigidly connected together, occupy a large amount of space, and consequently the charges for transportation are excessive, and said devices are all liable to be damaged. To reduce this expense by lessening the space which the said devices may occupy is one of the objects of our invention, and to attain this end we find that the construction and application of the fastenings set forth in the drawings and herein described are of great advantage and utility.

In Fig. 1 of the drawings we have shown a flower-stand with all but the uppermost of the trays or baskets for the reception of the flower-pots removed, and this stand consists, essentially, of a number of legs or supporting-bars A, which are preferably made of iron substantially T-shaped in cross-section, and are bent so as to form ledges or steps *a*, upon which the baskets or trays A' for the pots may

rest and be secured, the wires of said baskets being attached to the connecting-rods A^2 , which are a part of the framework thereof. These legs are made counterparts one of the other and are secured at their upper ends to and within a circular piece B , which is provided with an annular flange b at its periphery and with an opening b' in its center for the reception of a screw or bolt b^2 , which secures thereon the disk or top b^3 . The flange b is provided with a number of vertical slots or recesses b^4 for the reception of the ribs a' of the supporting bars or legs.

By reference to Figs. 1 and 3 it will be seen that the ribs a' of the supporting-bars A fit within the slots b^4 , and that the flanges a^2 of said bars or supports rest upon the upper surface of said flange b , and that the disk or top b^3 lies on top of said flanges and the bottom of the basket and securely holds them in position by reason of its bolted connection b^2 with the piece B . The legs being secured as above set forth at their upper portions, it becomes necessary to brace them laterally at their elbows or bends, which form the steps or ledges a , and in order to do this we employ connecting-rods A^2 , which, as before stated, compose a portion of the framework of the baskets and are bent so as to attach them to the inner and outer elbows of the legs. These connecting-rods are secured to the supporting-legs A by means of a strap C , which is bolted to the upper or outer part of the leg, as is clearly shown in Fig. 10, and is provided at its outer end with a hook or curved portion c , which overlaps the connecting-rods A^2 and retains the same firmly in position. As shown in Fig. 1, these straps are employed at the outer elbows a^3 as well as the inner elbows a^4 , and in order to shorten the bolts, which are used for securing them to the supporting-legs, the rib a' thereof is formed with a recess a^5 , within which the nut of the bolt may fit.

Instead of employing the construction of the strap shown in Fig. 10 we may use that illustrated in Figs. 11 and 12, in which the strap C' is bent at substantially a right angle, and is bolted to both the upright and horizontal portions of the supporting-leg A , and is formed at its central portion with a loop c' to receive the connecting-rod A^2 . It will therefore be seen and understood that the said securing-straps extend longitudinally along the supporting legs or bars and preferably transversely to the connecting-rods. In order to attach the ornamental wirework D to the supporting legs or bars, we provide the said legs with a number of clamps D^6 , consisting of two plates d and d' , as shown in Fig. 7, the first of which is flat, and the other one is formed with a bend d^2 to fit over the rib a' of the supporting-leg. The vertical wires D' of the wirework are then placed between the plates d and d' , and the said plates are bolted together and firmly secure the wirework in place, as is shown in Figs. 1 and 7.

We may sometimes use the construction for this purpose illustrated in Fig. 9, in which the clamp for securing the vertical wires D' is made of two pieces d^3 and d^4 , the piece d^3 being formed with a bend d^2 , rising from its body to fit over the rib a' of the supporting-leg and the piece d^4 being formed with a hook at one end to lap over the corresponding end of the body of the piece d^3 , the two being bolted together at their opposite ends. This construction is especially adapted for use when it is desired to secure the ornamental wirework to one side of the leg only.

In Figs. 13 and 14 we have illustrated a clamp L for securing together two wires or pieces l parallel with each other, in which the clamp is made of two plates approximated at their central portions and held together by means of a bolt or bolts and curved outwardly at their outer portions to receive and retain the rods l' .

In Figs. 15 and 16 is illustrated a modification of said fastenings, in which the clamp L' is made of two plates which are approximated at their edges and separated at their central portions, through which portions is passed a bolt m for securing them together and retaining them in place on the pieces l , which are placed between them.

Figs. 17 and 18 illustrate another modification in which the clamp L^4 is made of one piece bent around the parallel pieces l and bolted together at its free ends, and in Figs. 19 and 20 is shown a modification of the strap illustrated in Figs. 11 and 12. In these views the ribs a' of the T-irons are not in a single plane as in Figs. 11 and 12, but stand in planes at right angles to each other, while the flanges of the T-irons are here in a single plane and the leg is disconnected from the ledge-piece. The letter C^2 designates a strap which is bolted at its lower end to the rib a of the leg, thence extends up into a curved portion c^2 , which passes over the rod A^2 and is finally bolted to the upper side of the rib a' of the ledge-piece; but in this modification there is an additional strap c^3 , having its ends secured by the bolts to the inner faces of the two ribs and its bend bearing against the inner side of the rib A^2 .

In Figs. 21 and 22 we have shown a connection for joining the ends of two rods l , which consists in employing the curvilinear pieces $z z$ to embrace the rods and bolting them together between the ends of the same.

From the foregoing it will be understood that our invention consists, essentially, in the use of clamps for securing together the parts of the various structures.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination with an iron of T-shaped cross-section, and a rod extending along adjacent one flange of the T; of a clamp consisting of a piece having a bend rising from

its body and embracing the rib of the T, a second piece having a hook at one end passing by the adjacent flange of the T and embracing the end of the body of the first piece, and means for detachably connecting the opposite ends of said pieces, as and for the purpose set forth.

2. The supporting-frame A, formed of a number of legs with ledges or steps for the reception of the flower-pot receptacles, in combination with the connecting-rods, ornamental wirework, a number of clamps on the supporting-legs adapted to detachably secure the ornamental wirework and flower-pot receptacles or baskets thereto, and the piece B, having the annular flange *b*, provided with the slot *b*¹, and the disk *b*³, for securing the supporting-legs together at their top, as well as the upper basket thereto, all constructed, arranged and operating substantially as and for the purpose set forth.

3. The combination of the piece B, having the annular flange *b*, provided with the slots

*b*¹, with the disk *b*³, centrally secured to the piece B, and on the flange *b*, and adapted to secure the supporting-legs as well as the upper basket in position, substantially as described.

4. The combination with an iron of T shape in cross-section, of a clamp consisting of a piece having a bend rising from its body and embracing the rod of the T, and its body extending at right angles on each side of said bend, a second piece located transversely on the flanges of the T-bar on the opposite surface thereof from the rib, means for detachably connecting the ends of the pieces comprising the clamp, such means being located at a distance from the flanges of the T-bar, and a rod extending between said flanges and fastenings, substantially as described.

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