W. L. BAXTER.

STRUCTURAL METAL CONSTRUCTION FOR TANNING FRAME SUPPORTS OR OTHER USES.

APPLICATION FILED FEB. 9, 1917.

1,293,670. Patented Feb. 11, 1919.

Fig. 1.

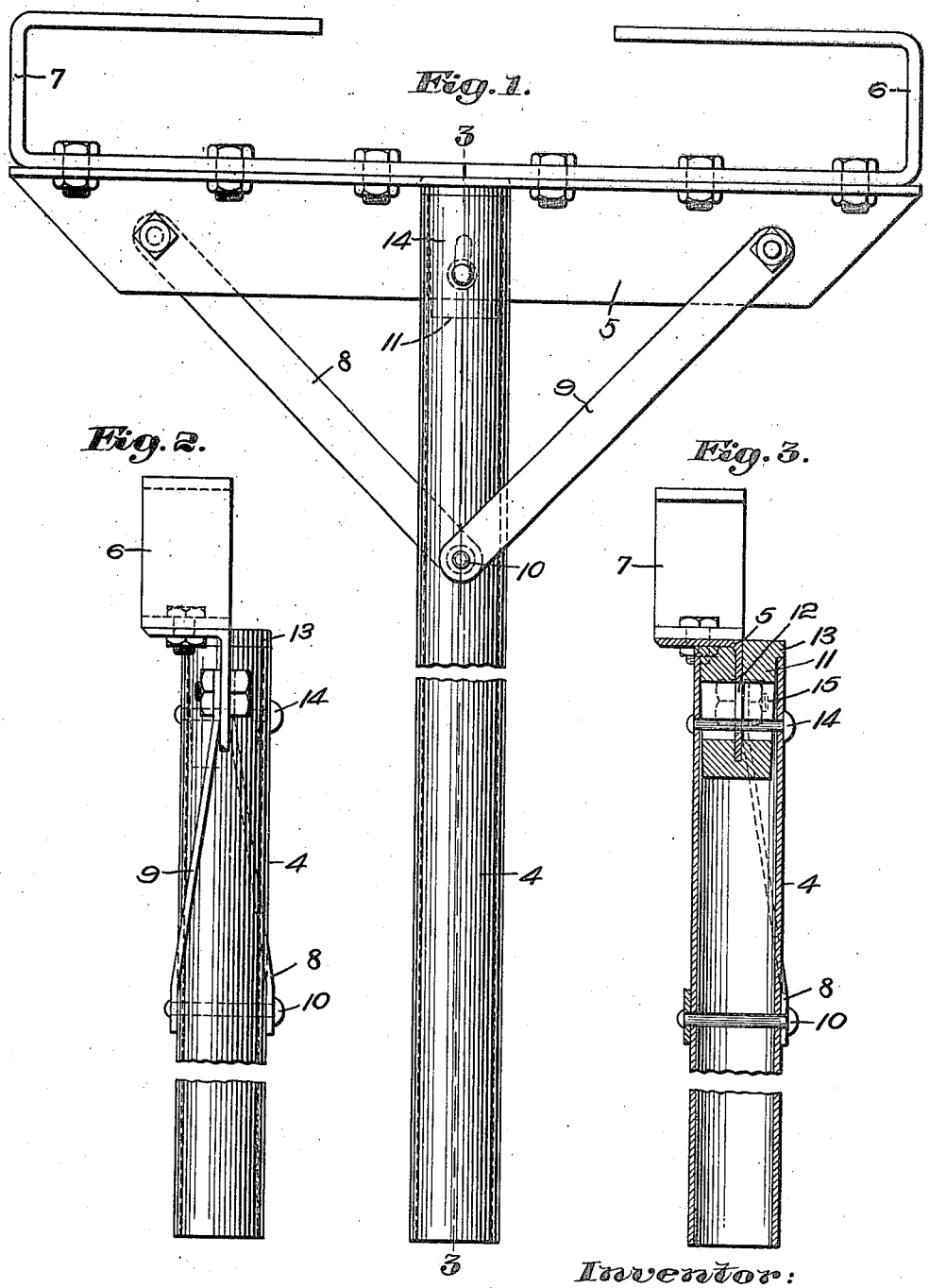

Fig. 2.

Fig. 3.

Inventor:
William L. Baxter,
by Emery Booth Janney & Varney,
Attys

UNITED STATES PATENT OFFICE.

WILLIAM L. BAXTER, OF BEVERLY, MASSACHUSETTS, ASSIGNOR TO ECONOMIC STEEL RACK COMPANY, OF JAMAICA PLAIN, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

STRUCTURAL-METAL CONSTRUCTION FOR TANNING-FRAME SUPPORTS OR OTHER USES.

1,293,670. Specification of Letters Patent. Patented Feb. 11, 1919.

Application filed February 9, 1917. Serial No. 147,693.

To all whom it may concern:

Be it known that I, WILLIAM L. BAXTER, a citizen of the United States, and a resident of Beverly, in the county of Essex and State of Massachusetts, have invented an Improvement in Structural-Metal Constructions for Tanning-Frame Supports or other Uses, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention pertains to improvements in structural metal constructions primarily, though not exclusively, adapted for supports for tanning frames. Among the objects of my invention are to provide an improved joint between pipe or tubing and structural iron, such joint providing increased strength and rigidity, as well as, for some aspects of my invention, an increased resistance to breakage or weakening when pounded, as with a sledge hammer.

The character of the invention may be best understood by reference to the following description of an illustrative embodiment thereof, shown in the accompanying drawing, wherein:—

Figure 1 is a side elevation of a tanning frame support;

Fig. 2 is an end elevation thereof, partly broken away;

Fig. 3 is a sectional elevation thereof, on the line 3—3 of Fig. 1 partly broken away.

Referring to the drawing, I have shown for purposes of illustration, a tanning frame support comprising the tubular post 4, adapted to be partially driven into the ground and provided with a transverse structural iron frame element, herein shown as an angle iron 5 having one web fitting in a slot in the end of the tubular post 4.

To the upper or horizontal web of the angle iron 5, I preferably attach, as shown, bent straps of iron 6—7, constituting a preferred form of engagement means for engaging the frames on which the skins to be tanned or stretched. I may and preferably do also provide braces 8—9 preferably connecting opposite sides of the down turned web of the angle bar 5 with opposite sides of the post 4. The lower ends of said braces are preferably attached to the post 4 by a single attachment element, preferably the rivet 10, while the upper ends of said braces 8—9 are preferably detachably connected to the angle bar 5, as by bolts, for reasons which will more clearly appear hereafter.

When the bottom end of the post 4 is to be driven into the ground, it is convenient to apply blows from a sledge or hammer at a point in line with the post 4. This necessitates striking on top of the structure attached to the end of the tubular support. To prevent breakage or loosening of the joint when thus hammered, as well as to increase its strength and rigidity, I preferably provide a plug 11 fitting the opening in the pipe 4 and provided with a slot 12 to receive the down turned edge of the angle bar 5. The plug 11 is preferably provided with a flange 13 resting on the end of the pipe 4 and preferably presents a support for the horizontal flange of the angle bar at one side and a projection at the other side, sufficient to bring the top of the plug 11 substantially even with the top of the angle bar 5. The bent strips 6 may, if desired, be detached while the post 4 is driven, thus presenting an even surface to the sledge. While the post is being driven, I preferably remove the bolts securing the braces 8 and 9 to the angle bar, thus relieving the braces of any strains during the hammering operation. The plug 11 may be held in the pipe 4 by any suitable retaining means, typified by the rivet 14 passing through a slot 15 in the plug 11. The slot 15 prevents any shearing strains on the rivet 14 while the post is being driven. The bolt holes at the upper ends of the braces 8—9 are preferably slotted, so that if the plug 11 is driven farther into the pipe 4, the bolts may be replaced without difficulty. The plug 11 is preferably chamfered on the lower upper edge of the slot 12, so that the usual fillet of the angle bar will not prevent proper assembly.

The tanning or sunning frame support illustrated is durable, simple, strong, convenient and inexpensive.

While I have elected to illustrate and describe a tanning frame support, it is clear that some phases of my invention are of

utility in other connections. For instance, the joint may be used to advantage in connection with fence posts, or any other purpose where it is necessary or desirable to angularly join to a tube an angle bar or other structural shape having a depending flange, nor need all the features of my invention be used in combination with each other. Changes involving omission, substitution, re-arrangement or reversal of parts may be made without departing from the scope of my invention, which is best defined in the following claims.

Claims:

1. A construction of the class described comprising in combination a tubular element having an axial slot therein, a plug having a similar slot, a structural shape having a web entering both of said slots, said plug being provided with a flange abutting the end of said tubular element and providing a support for another web of said structural shape.

2. A construction of the class described comprising in combination a tubular element having an axial slot in one end thereof, a plug entered in said end of said tubular element and provided with a slot and with a flange abutting the ends of said tubular element, an angle iron having a flange entered in both of said slots and a second flange abutting on one side of the top of said plug, the other side of the top of said plug being extended to a point substantially flush with the top of said structural shape.

3. A device of the class described comprising, in combination, a pipe 4, a plug 11 provided with a flange 13, the angle iron 5 having a web entering slots in said pipe and plug, and securing means engaging said pipe and loosely engaging said web and said plug thereby to secure said pipe, plug, and angle iron together while avoiding shearing strains on said securing means when said pipe is driven into the ground.

In testimony whereof, I have signed my name to this specification.

WILLIAM L. BAXTER.