No. 890,804. PATENTED JUNE 16, 1908.

W. SHEARS.

SCAFFOLD CLAMP.

APPLICATION FILED NOV. 12, 1906. RENEWED FEB. 3, 1908.

Fig. 1.

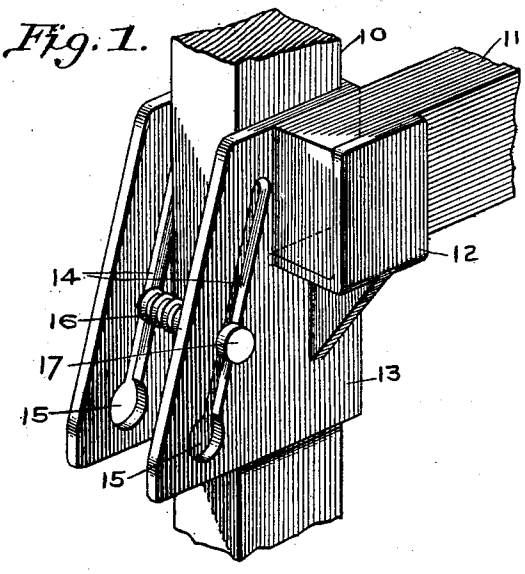


Fig. 3.

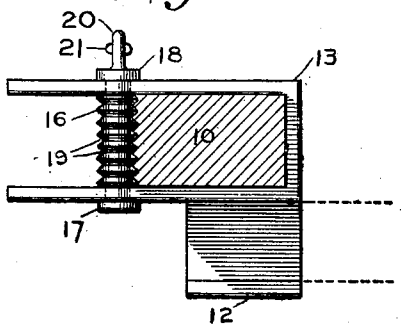


Fig. 4.

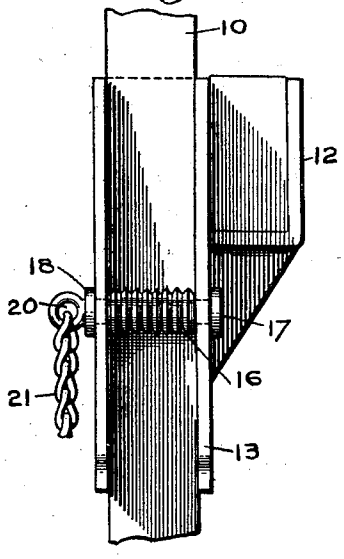
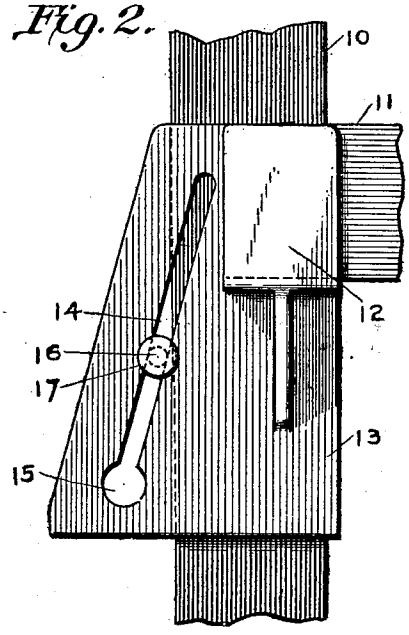


Fig. 2.



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SCAFFOLD-CLAMP.

No. 890,804. Specification of Letters Patent. Patented June 16, 1908.

Application filed November 12, 1906, Serial No. 343,174. Renewed February 3, 1908. Serial No. 414,060.

To all whom it may concern:

Be it known that I, WILLIAM SHEARS, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Scaffold-Clamps, of which the following is a specification.

My invention relates to improvements in self-clamping brackets to secure the cross-beams of a scaffold in proper position upon the uprights, and has for its object the providing of a construction for the device whereby it may be adapted to be readily shifted upon the uprights and yet automatically clamp itself with the utmost security at any position to which it may be shifted by the scaffold builder.

In the accompanying drawings forming a part of this specification, Figure 1 is a perspective view of the clamp adjusted in its operative relation to an upright and cross-piece of the scaffold; Fig. 2 is a side elevation of the same; Fig. 4 is a front elevation; and Fig. 3 a top plan view, showing the upright of the scaffold in cross section.

Like reference numerals indicate like parts in all the figures.

10 is one of the uprights of the scaffold and 11 one of its cross-pieces, the end of said cross-piece being supported in the bracket 12 projecting from the side of the stirrup-formed clamp-piece 13. The said stirrup 13 is provided with parallel oblique button-hole slots 14, 14, one being in the forward part of each arm of said stirrup and both inclined upwardly toward the back part of said stirrup, and so positioned that their upper ends shall somewhat overlie the forward part of the scaffold upright. The lower portion of these slots, and their enlarged ends 15, 15, lie entirely forward and clear of the scaffold upright; and a roller 16, having knobs 17 and 18 on its respective ends, is adapted to be inserted through the aforesaid enlargements 15, 15 of the button-hole slots and then moved up through said slots into contact with the forward face of the scaffold upright. The inner portion of this roller is enlarged and provided with teeth or grooves 19 adapted to engage with and embed themselves in the said face of the scaffold upright when a weight is placed upon the bracket and the consequent downward movement of the clamp-piece forces the roller higher up into its inclined retaining slots and into closer contact with the face of the upright. The clamp is released from the upright by relieving the weight upon it and pulling the roller down into the lower ends of the retaining slots; but when not thus intentionally released, the device will obviously tend to clamp itself more and more tightly and securely upon the upright as the weight placed upon its bracket is increased. The knob 18 of the roller is provided with an eyelet 20 and chain 21 whereby it may be secured to the clamp-piece.

My invention as hereinbefore set forth is embodied in a particular form of construction, but I do not limit it thereto or to less than all the possible forms in which the device as hereinafter claimed may be embodied and distinguished from prior devices for a like purpose.

I claim:—

1. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a roller operating in said slots to engage the face of said upright, substantially as specified.

2. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a toothed roller operating in said slots to engage the face of said upright, substantially as specified.

3. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined button-hole slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a roller operating in said slots to engage the face of said upright, substantially as specified.

4. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined button-hole slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a toothed roller operating in said slots to engage the face of said upright, substantially as specified.

5. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-up-

right, said stirrup having its arms provided with inclined slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a roller having retaining knobs on its ends and operating in said slots to engage the face of said upright, substantially as specified.

6. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a toothed roller having retaining knobs on its ends and operating in said slots to engage the face of said upright, substantially as specified.

7. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined button-hole slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a roller having retaining knobs on its ends and operating in said slots to engage the face of said upright, substantially as specified.

8. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined button-hole slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured to said stirrup, and a toothed roller having retaining knobs on its ends and operating in said slots to engage the face of said upright, substantially as specified.

9. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold upright, said stirrup having its arms provided with inclined slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured laterally upon said stirrup, and a roller operating in said slots to engage the face of said upright, substantially as specified.

10. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured laterally upon said stirrup, and a toothed roller operating in said slots to engage the face of said upright, substantially as specified.

11. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined button-hole slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured laterally upon said stirrup, and a roller operating in said slots to engage the face of said upright, substantially as specified.

12. In a scaffold-clamp, in combination, a stirrup adapted to embrace the scaffold-upright, said stirrup having its arms provided with inclined button-hole slots whose upper ends are positioned to overlie the sides of said upright, a bracket secured laterally upon said stirrup, and a toothed roller operating in said slots to engage the face of said upright, substantially as specified.

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