F. S. CULVER.

SPINNING AND TWISTING MACHINE.

APPLICATION FILED JAN. 13, 1910.

983,607. Patented Feb. 7, 1911.

Fig. 1.

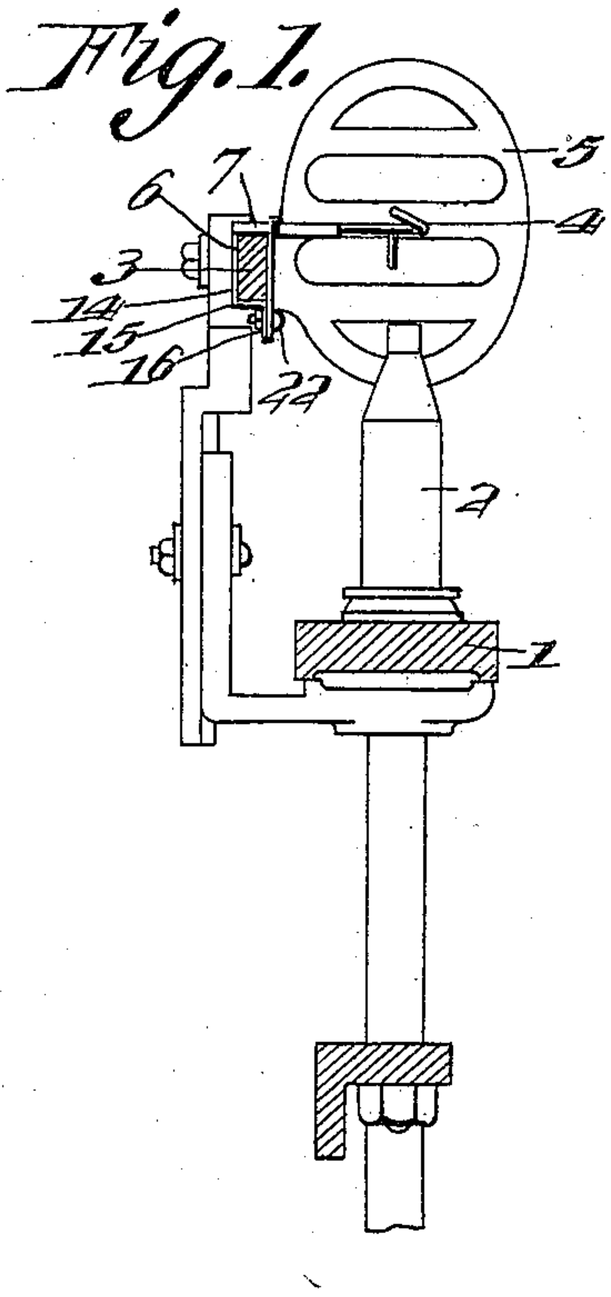


Fig. 2.

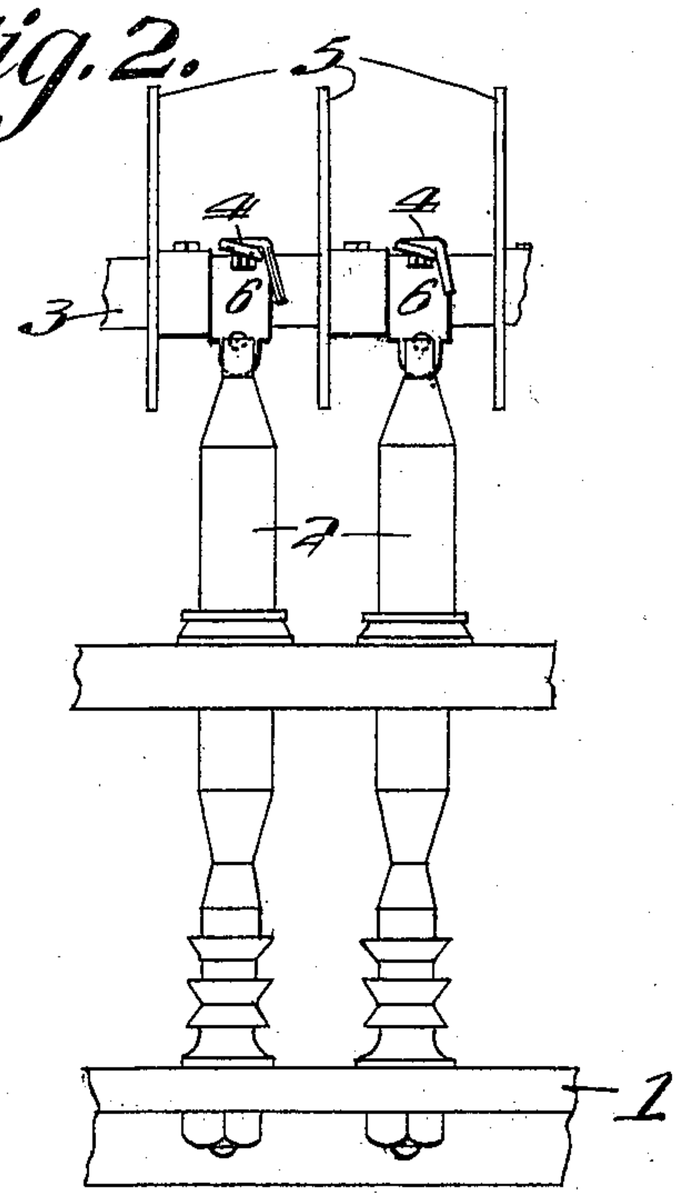


Fig. 3.

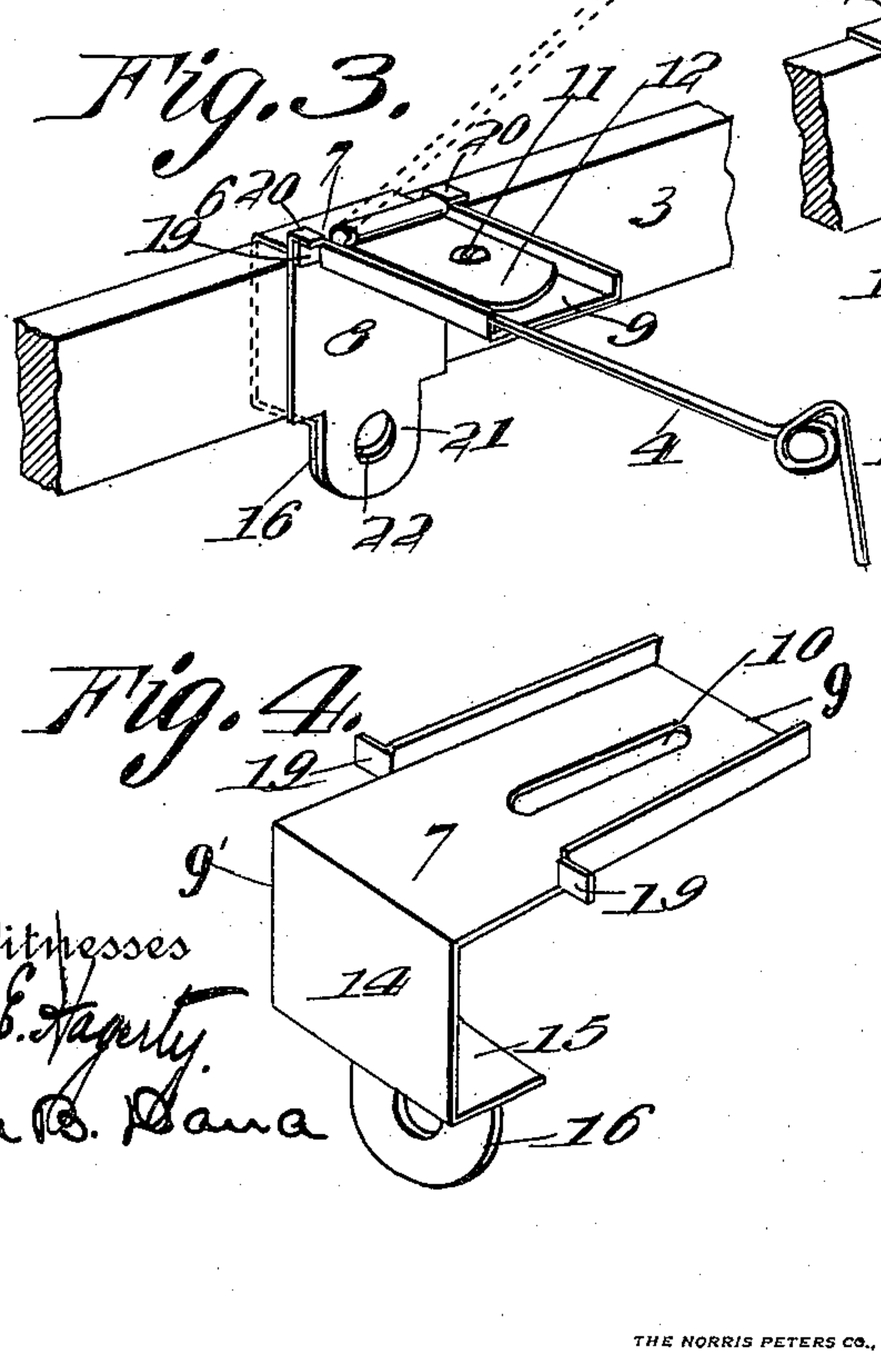


Fig. 6.

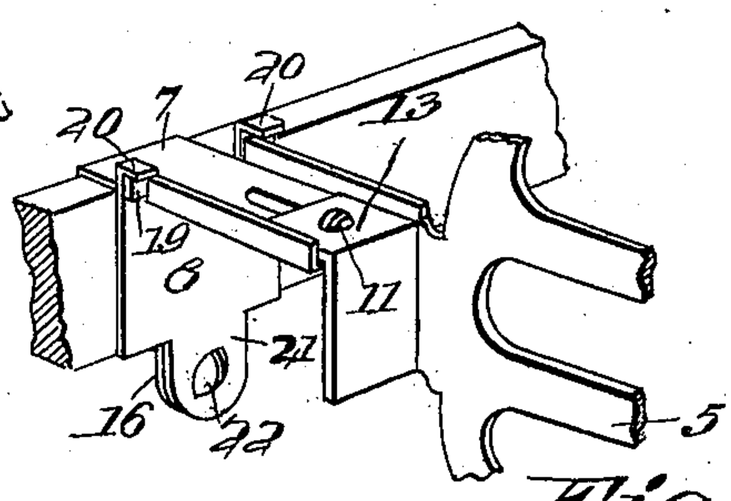
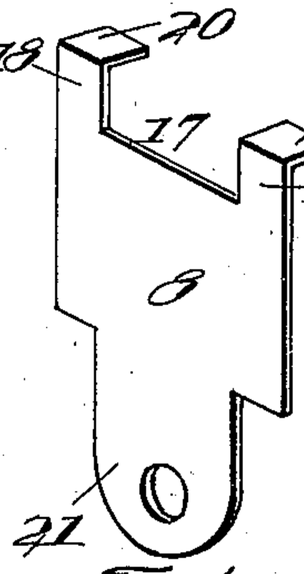


Fig. 4.

Fig. 5.



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FREDERICK SLOCUM CULVER, OF TAUNTON, MASSACHUSETTS.

SPINNING AND TWISTING MACHINE.

983,607. Specification of Letters Patent. Patented Feb. 7, 1911.

Application filed January 13, 1910. Serial No. 537,877.

To all whom it may concern:

Be it known that I, FREDERICK S. CULVER, a citizen of the United States, residing at Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Spinning and Twisting Machines, of which the following is a specification.

This invention relates to improvements in appliances for spinning and twisting machines.

More particularly, it pertains to adjustable holders or clamps for guide wires and separators located upon the top rail of a spinning or twisting machine.

The object of the invention is to construct a simple and effective holder which may be clamped around the top rail of the machine in any desired position and is adapted for use to hold either guide wires or separators.

Further, it is an object to construct these holders so that they may be produced in large quantities from sheet metal, and at comparatively small cost.

With these objects in view, the invention will now be hereinafter fully described, reference being had to the accompanying drawings, in which,

Figure 1 is a transverse sectional view of a part of a spinning machine, showing the bobbin rail and the top rail, with the usual equipment. Fig. 2 is a front view of the section of the machine shown in Fig. 1. Fig. 3 is a perspective view of the holder forming the subject matter of this invention, showing it clamped to the top rail. Fig. 4 is a perspective view of one member of the holder. Fig. 5 is a perspective view of the companion member, and Fig. 6 is a view of the holder having a separator secured thereto.

Referring more particularly to said drawings, 1 is the spinning or bobbin rail upon which are carried the spindles which support bobbins 2; 3 is the top rail, 4 are guide wires and 5 are separators. Clamped around the top rail 3 and holding said guide wires 4 and if desired, the separators 5, are the holders 6. Said holders 6 each consist of two members, a top or supporting member 7 and a companion or clamp member 8.

The top or supporting member 7 has secured thereto the guide wire structure or the separator-plate, and consists of a sheet metal plate having a top horizontal member which extends across the top of the top rail 3, and projects over the front edge of the latter to form a trough like shelf 9 and a bar or rail engaging element 9′. Said shelf 9 is formed by turning up the opposite sides of the projecting portion and is provided with a longitudinal slot 10. Said slot 10 forms an adjustable bolt hole to receive the bolt or screw 11 by means of which the hinge plate 12 of the guide wire 4 is fastened to the holder, or, as shown in Fig. 6, the clamping plate 13 of the separator may be thus secured to the shelf 9 in the same manner. The bar or rail engaging element 9′ is formed by continuing the member 7 downwardly and then bending it inwardly as at 14 and 15 to embrace the rear side and the bottom of the top rail 3. The forward edge of the portion 15 is provided with a centrally apertured downturned ear 16, whose function will hereinafter appear.

The companion member or plate 8 consists of a sheet metal plate having a cut-away portion or indentation 17 to permit the plate 8 to bear against the front face of rail 3 and to embrace by ears 18 the sides or edges of the shelf 9, where the latter projects over the edge of said rail 3. The said upwardly projecting ears 18 not only embrace the edges of said shelf 9, but lie behind and interlock with the out-turned projections or fingers 19 which are formed by moving the rear ends of the upturned flanges forming the sides of the shelf 9 from said shelf and bending them laterally at right angles to said shelf. The upper projecting ends of the ears 18 are also overturned, as at 20 to overlie the fingers 19, thus completely interlocking the two members 7 and 8 of the holder at the top of the rail 3. The bottom of plate 8 is provided with a downwardly projecting apertured ear 21 which is adapted to register with the ear 16 when said members 7 and 8 are interlocked around the rail 3, and receive a set screw or bolt 22 to rigidly attach the holder to the top rail.

It is evident from the foregoing description that the holding device is well adapted to be clamped to any top rail or guide rail of spinning machines and to hold either or both the guide wires, and the separators. Also, that its construction is simple and well adapted to be made in large quantities at comparatively small cost, owing both to its simplicity of manufacture and the small amount of sheet material required in a single holder.

Having thus described my invention, I claim as new and desire to secure by Letters Patent;—

1. A guide wire holder for spinning machines comprising, in combination, a supporting member composed of a shelf and portions adapted to embrace the top, bottom and rear faces of a top rail, and a clamp member arranged against the front face of said rail, said clamp member being interlocked with said shelf at its upper end and bolted to said supporting member at its lower end below said rail.

2. A guide wire holder for spinning machines comprising, in combination, a supporting member and a clamp member, said supporting member comprising a shelf member and portions adapted to surround the top, bottom and rear sides of a top rail, and having locking projections formed thereon, and said clamp member consisting of a plate formed to interlock with said locking projections and to be bolted to said supporting member below the top rail.

3. A guide wire holder for spinning machines comprising, in combination, a supporting member and a clamp member, said supporting member comprising portions adapted to embrace the top, bottom and rear faces of the top rail, a horizontally forwardly projecting shelf member having a longitudinal bolt slot and locking members formed thereon, and said clamp member comprising a plate adapted to interlock with said locking members at its upper end to be bolted to said supporting member below said top rail.

4. A guide wire holder for spinning machines comprising, in combination, a supporting member and a clamp member, said supporting member being adapted to embrace the top, bottom and rear faces of the top rail and having a depending bolt ear and a forwardly projecting shelf, and ears projected laterally from said shelf adjacent the upper edge of the top rail, and said clamp member comprising a plate adapted to lie against the front face of the top rail, a depending bolt ear adapted to register with the bolt ear on said supporting member, and upwardly projecting members adapted to embrace the sides of said shelf and to lie between said laterally projected ears and the top rail and forwardly projecting fingers formed on the upper ends of said shelf embracing members and adapted to overlie said laterally projected ears, whereby the upper end of said clamp member may interlock with said supporting member and the lower end of said clamp member may be bolted to said supporting member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK SLOCUM CULVER.

Witnesses:

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