(No Model.)

P. M. MISHLER.

WIRE FENCE MACHINE.

No. 587,043. Patented July 27, 1897.

Fig. 6.

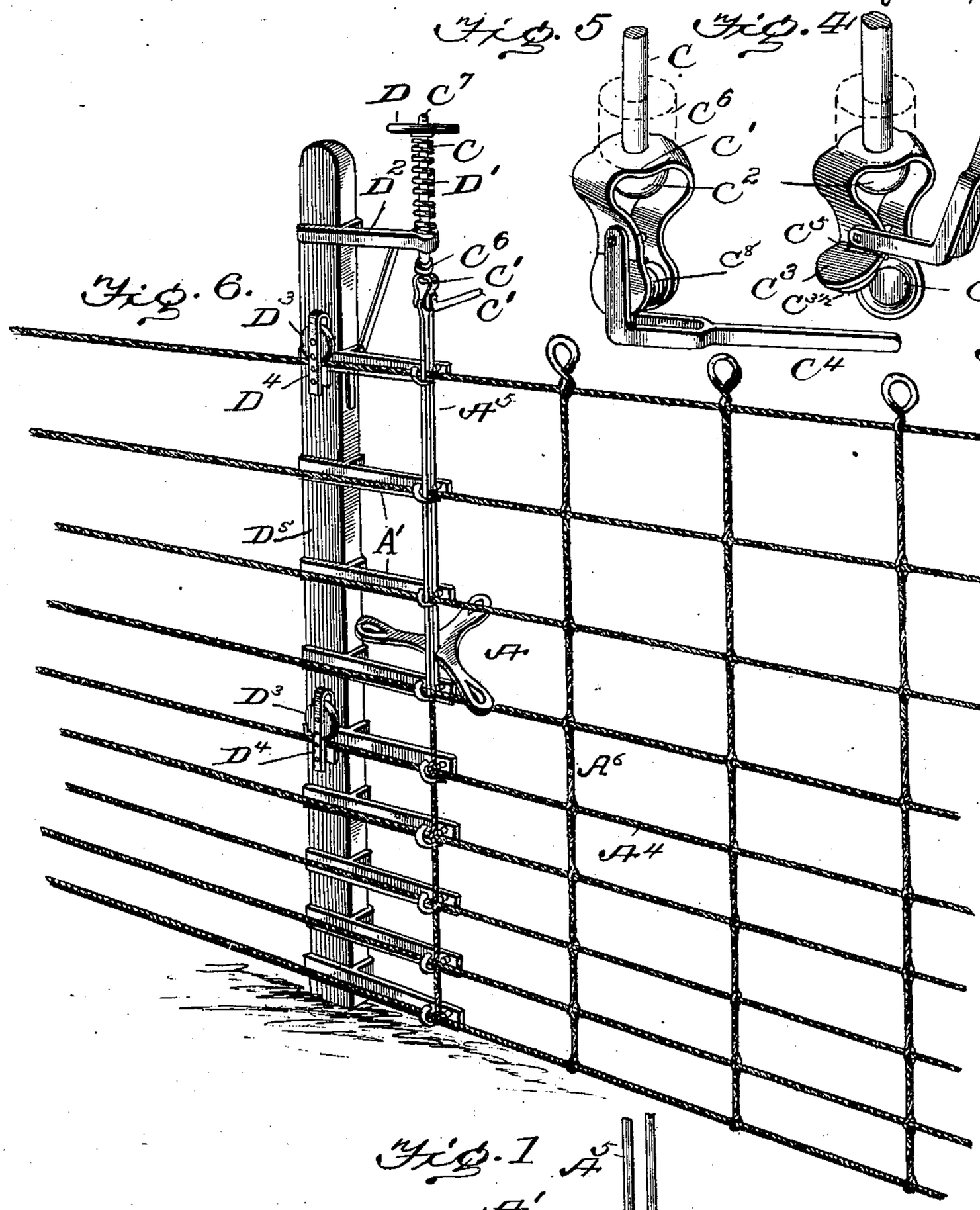


Fig. 5

Fig. 4

Fig. 3.

Fig. 1

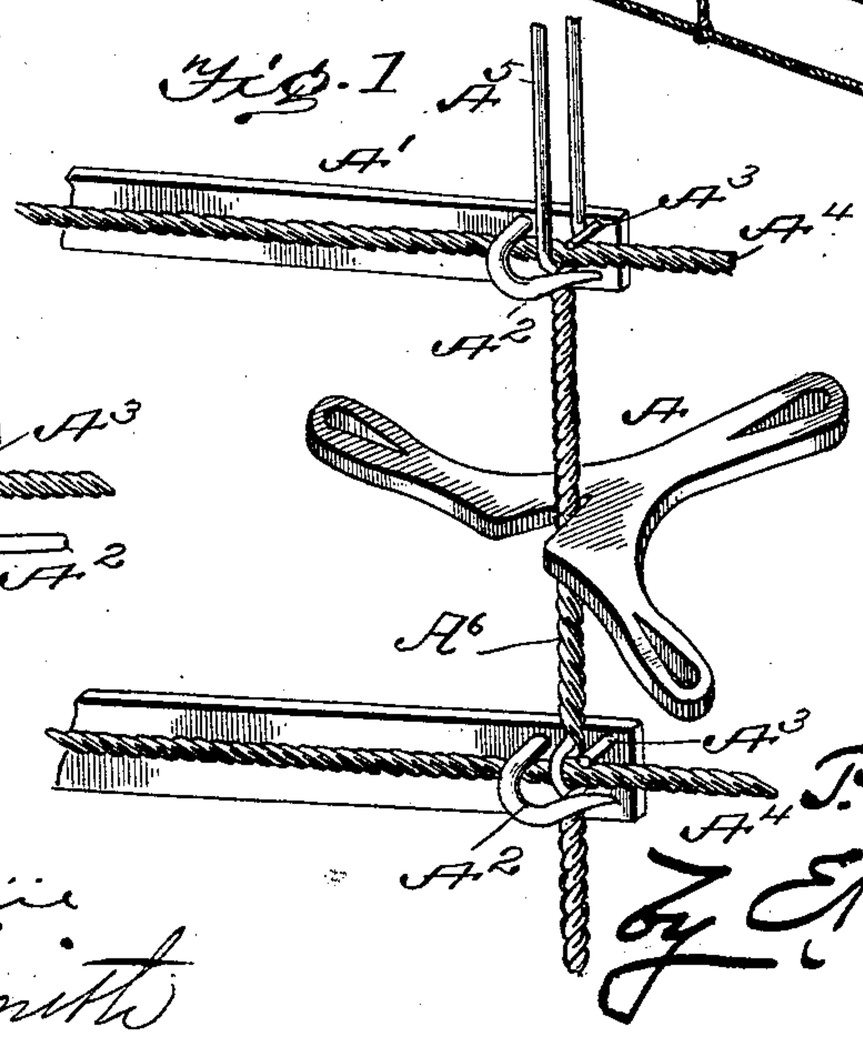
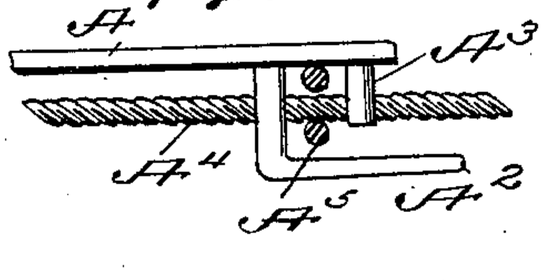


Fig. 2



Witnesses
John C. Shine
L. H. Smith

Inventor
P. M. Mishler
by E. H. Bates
Attorney.

UNITED STATES PATENT OFFICE.

PHARES M. MISHLER, OF HAGERSTOWN, MARYLAND.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 587,043, dated July 27, 1897.

Application filed February 6, 1897. Serial No. 622,307. (No model.)

To all whom it may concern:

Be it known that I, PHARES M. MISHLER, a citizen of the United States, residing at Hagerstown, in the county of Washington and State of Maryland, have invented certain new and useful Improvements in Wire-Fence Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to certain novel improvements in machines for making cable-stays with ornamental tops for wire fences out of one piece of wire, and at the same time placing the stay on the fence in a substantial manner without the use of additional fastenings or ties; and the same consists in the novel construction and arrangement, as will be hereinafter fully described.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a detail view of two of the arms provided with one hook and one turret at the one end for holding the wires in position, the other end broken away. Fig. 2 is a top view of a part of one of the arms, showing the wires in position. Fig. 3 is a detail view of the stay, in modified form, before it is placed in position on the fence. Fig. 4 is a perspective view of the part of the machine for holding and forming the top of the stay open to receive the same. Fig. 5 is a perspective view of the same part of the machine closed, and Fig. 6 represents a perspective view of the machine in position for operation.

Referring by letter to the accompanying drawings, A′ represents an arm provided with a hook A^2 at one end, that is turned first downward over the horizontal wire A^4, then forward over the perpendicular or stay wire A^5, and extending beyond the arm, passing below, and extending beyond a short peg or turret A^3 at the upper part of the arm for the purpose of holding the wires A^4 and A^5 in position, as shown in Fig. 1 of the drawings.

In constructing the machine as many of the arms A′ are employed as there are horizontal wires A^4 in the fence to be constructed.

A represents a wrench provided with three or more handles, so that it may be turned to the right or to the left by one person from one side of the fence without reaching through between the wires A^4 when turning the wrench for twisting the wires A^5 to form the cable-stays A^6.

C designates a rod that passes through an iron band or collar C′, the same being provided with a flat head C^2 under the collar, forming a swivel, and at the other end with a screw-thread C^7.

Both ends of the collar C′ are turned down in closing the head C^2 and pass between the jaws of a lever C^4 and being provided with beveled turrets $C^{3½}$ at the lower ends of the band or collar and with a hinge C^5 on the one side immediately above the turret $C^{3½}$ and below the lever C^4 for the purpose of raising the one side C^3, as shown in Fig. 4, to admit the top B′ of the perpendicular wire A^5, the hooks B having been previously hooked under the lower horizontal wire A^4. By drawing down the lever C^4 the turrets $C^{3½}$ will meet, forming a core C^8, as shown in Fig. 5. The lever C^4 can now be turned to the right or the left at the will of the operator, thus forming the top of the stay, and by raising the lever C^4 the turrets will part or separate, as shown in the machine, from the stay.

D designates a wheel at the top of the rod C, which is provided with threads fitting the threads C^7 on the rod C for raising or lowering the same.

D^2 represents a strong arm firmly fastened and braced to a post D^5, and is provided with an eye at one end, through which the rod C passes and then through a coiled spring D′ to and through the wheel D, so that the coiled spring D′ is held in a perpendicular position above the arm D^2 and below the wheel D for the purpose of keeping the perpendicular wires A^5 under tension and at the same time yielding to the strain as the wires are shortened by the necessary process of twisting for forming the cable-stays.

C^6 represents a rubber cushion-washer between the collar C′ and the arm D^2 for the purpose of arresting the reaction of the coiled spring D′ when the lever C^4 is raised, as shown in Fig. 4.

D^3 indicates a trolley that travels on the horizontal wire A^4 for the purpose of carrying

the machine, and the same is fastened to the post D^5 by means of a strap-iron D^4, having a series of perforations whereby the trolley may be raised for going uphill or lowered for going downhill.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the arms A′ mounted on the post D^5, of the hook A^2 and turret A^3, and means substantially as described for twisting the stay-wires.

2. The combination with the post provided with trolleys and horizontal arms, of the hooks and turrets secured to said arms, the rod C, spring D′, and wheel D, said spring encircling said rod and interposed between the arm D^2 and wheel D; the ring-forming device swiveled to the rod C, and the hand-lever C^4, substantially as described.

3. The combination with the holding device for the stay-wires, of the ring-forming device, comprising the vertical rod mounted on the arm D^2, the spring encircling said rod, and a hand-wheel, the swivel having the turrets $C^{3½}$, and the lever C^4, all substantially as described.

4. The combination of the post provided with the horizontal arms, trolley, and iron D^4 having the series of perforations, said arms having the hooks and turrets, the ring-forming device swiveled to a rod, the spring D′, and the lever C^4, hand-wheel D, turrets $C^{3½}$ $C^{3½}$, and wrench A, all substantially as described.

5. In a wire-fence machine, the combination with the swiveled ring-forming device, and post provided with the arms having the hooks and turrets, of the trolley, and the twisting-lever provided with the V-shaped notch and handles for manipulating said lever, all substantially as described.

6. In a machine of the character described, the hooks and turrets mounted on the arms A′ attached to the post, said post having the trolley, the ring-forming device comprising the vertical rod and spring encircling the same, the wheel on the rod, said ring-forming device, also carrying the side pieces provided with the turrets and the angular forked lever C^4, one side C^3 of the ring-forming device being hinged at C^5, and the twisting device A having the handles and V-shaped notch, all substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PHARES M. MISHLER.

Witnesses:

JNO. D. BREWER,

J. A. YOUNG.