

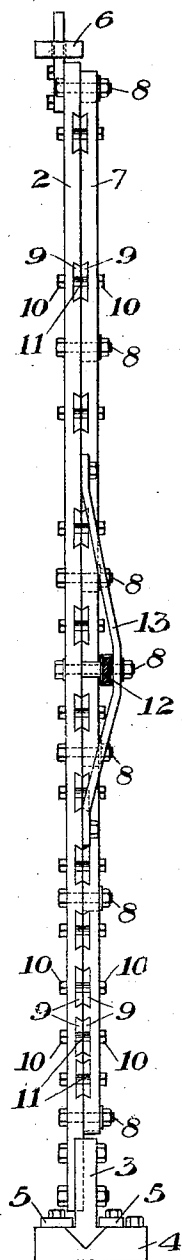
No. 866,050.

PATENTED SEPT. 17, 1907.

R. W. NEY.
MULTIPLE FENCE SHEAR.
APPLICATION FILED JUNE 18, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

Warren W. Swartz
R. A. Balderson

Fig. 2.

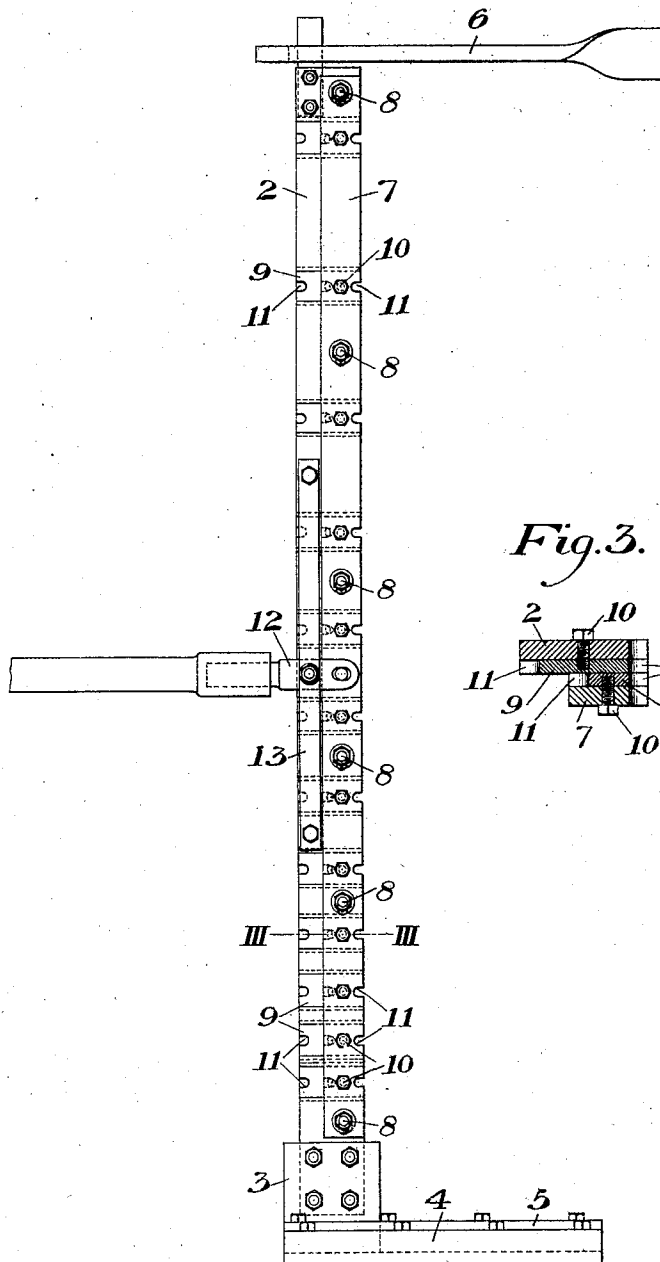
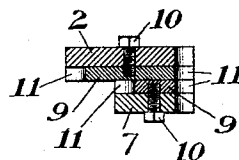


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

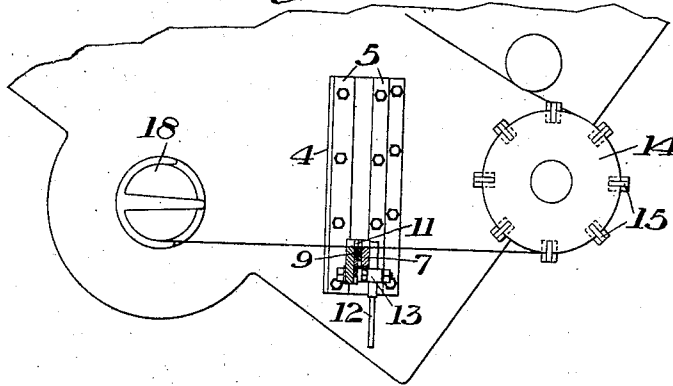
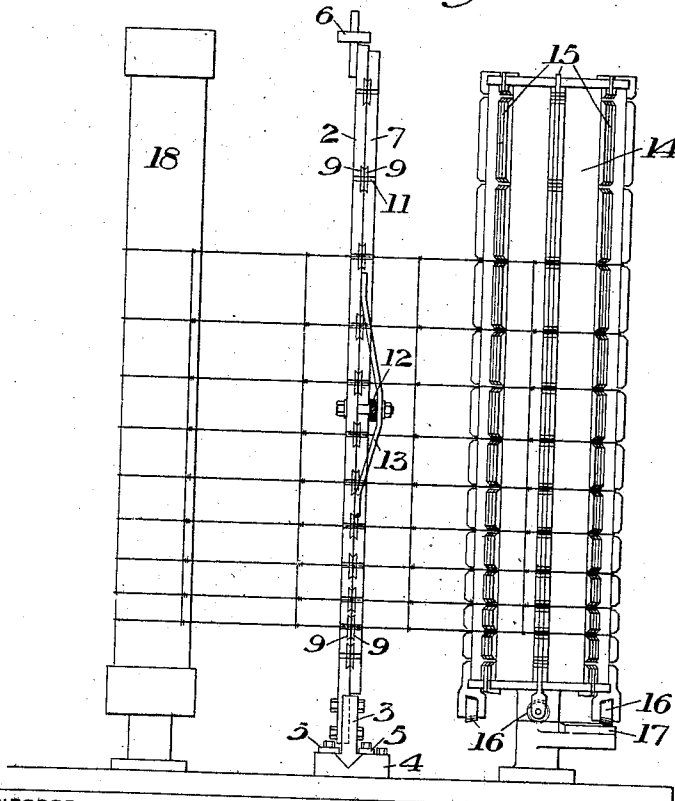


Fig. 5.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

ROBERT W. NEY, OF CLEVELAND, OHIO, ASSIGNOR TO AMERICAN STEEL & WIRE COMPANY,
OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

MULTIPLE FENCE-SHEAR.

No. 866,050.

Specification of Letters Patent.

Patented Sept. 17, 1907.

Application filed June 18, 1906. Serial No. 322,191.

To all whom it may concern:

Be it known that I, ROBERT W. NEY, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Multiple Fence-Shear, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of my improved shear device; Fig. 2 is a side elevation of the same; Fig. 3 is a cross section on the line III—III of Fig. 2; and Figs. 4 and 5 are respectively a plan and a side elevation showing the preferred arrangement of my improved shear in a fence machine.

My invention relates to shearing the wires of fence or wire fabric, and is designed to provide a simple and improved device for simultaneously cutting a series of these wires.

The invention is specially designed as an attachment to a wire fence machine; and in such case is employed to cut the longitudinal wires after the required length of fence has been wound on a take-up spool. It may, however, be used in other locations and with any desired type of fence or wire fabric having a series of wires extending in the same direction and which are to be severed.

In the drawings, in which I show a preferred form of the invention, 2 represents the stationary vertical shear blade, which is bolted at its lower end to a V-shaped shoe or slide 3 adjustable horizontally in the stationary base-plate 4 of the fence-making machine. This base-plate is provided with adjustable and removable guides 5 lapping over the V-flanges of the shoe or slide.

The top of the stationary shear-blade is preferably secured and braced by the slotted guide-bar 6, fastened to the upper part of the machine frame and through a slot in which the stationary blade extends.

The movable shear blade 7 is preferably of less width than the stationary shear blade, and is connected therewith by a series of bolts 8 which extend through holes in the stationary blade and through widened slots or holes in the movable blade.

The knives or cutter blades 9 preferably are formed of hardened steel and secured in dove-tail slots or side grooves in the adjacent faces of the two bars or shear blades by cap screws 10. The end edges of these blades are centrally notched, as shown at 11, and are preferably made reversible by notching both ends, thus giving a longer life. The stationary knife bar can also be reversed, as may also both the movable and the stationary bar.

The knives are of course spaced apart distances corresponding to the distances between the wires to be cut. In the case shown, the machine is adapted for cutting

"American" field fencing, in which the lower strand wires are closer together than the upper wires.

In the device as shown, the movable shear blade is actuated by hand through the lever 12 pivoted between the stationary shear blade and the vertical brace 13, and having a loose slotted connection with the movable shear blade.

The device is preferably located between the feeding drum and the winding drum of a fence machine. Thus, in Figs. 4 and 5, 14 represents the feeding drum; which in this form is shown as provided with crimping bars 15 actuated by rollers 16 bearing upon cams 17. My shearing device is placed between this feeding drum 14 and the winding drum or take-up spindle 18, on which the finished fence is wound. 4 indicates the base plate or guide for the shear, and I have shown the shear as arranged in cutting position. The shear is, however, normally moved back on the guide; and after the required length of fencing has been produced and wound on the take-up spindle, the knife blades are pushed in along the guides 5 so that the wires are entered in the knife slots. The hand lever is then actuated, thus shearing all of the longitudinal wires simultaneously.

The advantages of my invention result from the simplicity of the device, and the doing away with hand cutting of each successive wire of the fence. The output of a fence machine is increased; and less hand labor is necessary.

The spacing of the notches may be varied to accord with the spacing of the fence wires, the arrangement of the shear blades may be varied, the blade or blades may be actuated by connection with the fence machine proper, or with a power connection instead of by hand, and many other changes may be made without departing from my invention.

I claim:—

1. A shear device for wire fabrics, having a series of shear blades spaced apart in accordance with the fabric wires, means for adjusting the shear device toward and from the fabric to be severed, and connections for actuating the shear blades simultaneously; substantially as described.

2. In a shear device for wire fabrics, a series of notched knives arranged to receive the wires, means for adjusting the shear device toward and from the fabric to be severed, and connections arranged to actuate said knives simultaneously; substantially as described.

3. In a shear device for wire fabrics, a stationary shear blade, a movable shear blade, a series of notched knives mounted in each blade, connections arranged to move one of said blades endwise and means for adjusting the entire shear device toward and from the wire fabric to be severed; substantially as described.

4. The combination with a wire fence machine, of a multiple shear device arranged between the machine and the winding drum and adjustable to and from the strand wires; substantially as described.

5. A shear device for wire fabrics having a series of removable and reversible shear blades spaced apart in accordance with the fabric wires, means for adjusting the shear device toward and from the fabric to be severed, and connections for actuating the shear blades simultaneously; substantially as described.
6. A shear device for wire fabrics having a series of removable and reversible notched shear blades spaced apart in accordance with the fabric wires, means for adjusting the shear device toward and from the fabric to be severed, and connections for actuating the shear blades simultaneously; substantially as described.
7. An attachment for wire fence machines, comprising a shear device supported between the take-up spindle and the

crimping drum and adjustable to and from the strand 15 wires, said shear device being arranged to cut the strand wires simultaneously; substantially as described.

8. The combination with a wire fabric-making machine having a take-up device, of a multiple shear device between the machine proper and the take-up mechanism, said multiple shear device being adjustable toward and from the plane of the fabric; substantially as described.

In testimony whereof, I have hereunto set my hand.

ROBERT W. NEY.

Witnesses:

S. G. WERNER,
JOS. H. KNUFF.