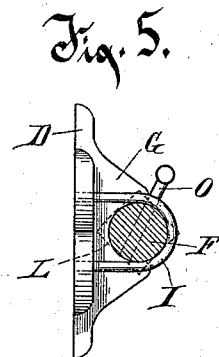
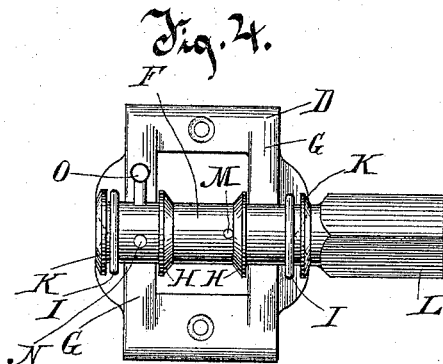
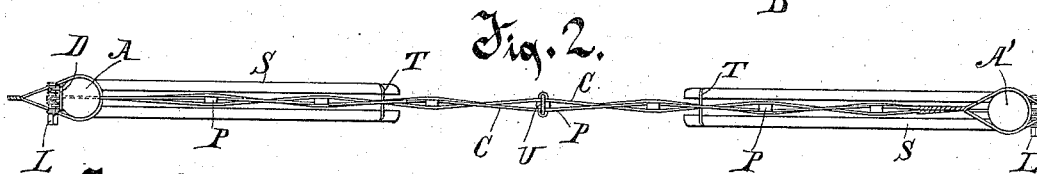
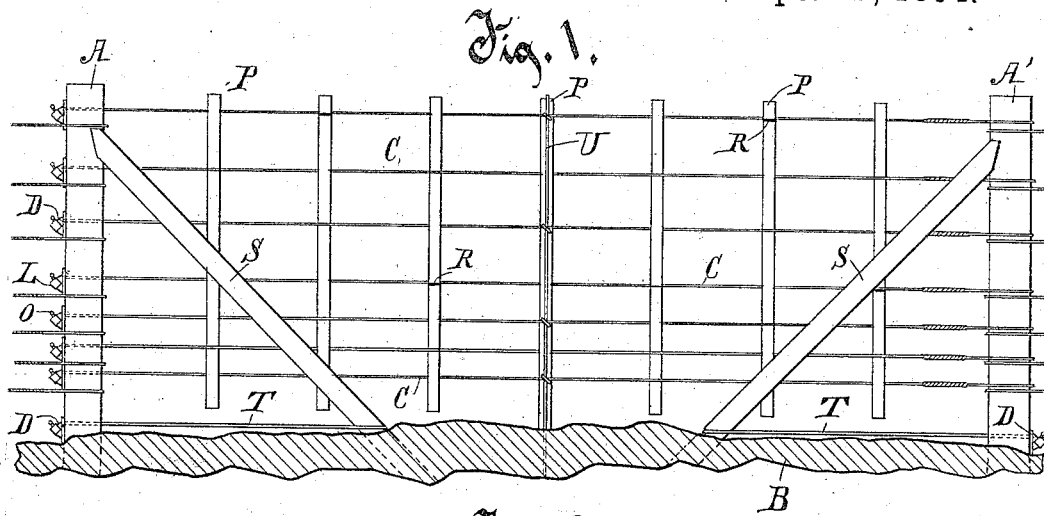


(No Model.)

C. W. BERKES & P. LESCH.
WIRE FENCE.

No. 526,372.

Patented Sept. 25, 1894.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES W. BERKES AND PETER LESCH, OF MILWAUKEE, WISCONSIN.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 526,372, dated September 25, 1894.

Application filed June 11, 1894. Serial No. 514,158. (No model.)

To all whom it may concern:

Be it known that we, CHARLES W. BERKES and PETER LESCH, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have
5 invented a new and useful Improvement in Wire Fences, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 Our invention relates to wire fences of the class that are used largely on farms, for partition or stock-turning purposes.

The especial objects of the invention are to provide means for straining the wires longitudinally and holding them taut and against
15 vertical or horizontal displacement. Incidentally thereto it is an object to provide simple, reliable and easily adjusted devices, that are also inexpensive, strong and durable.

20 The invention consists of the devices and their parts and combinations as herein described and claimed, or their equivalents.

In the drawings, Figure 1, is an elevation of our improved fence having thereon the devices for straining and securing the wires taut
25 longitudinally, and the other devices for retaining the wires against vertical or horizontal displacement. The section of fence thus shown is unusually short, being, however,
30 sufficient to illustrate our invention. The sections of the fence may be of considerable length if desired, it being only necessary therefor to extend the wires and insert a sufficient number of intermediate stay slats or
35 false posts, of the character shown in the drawings. Fig. 2, is a top plan view of our improved fence. Fig. 3, is an edge elevation of a stay slat or false post. Fig. 4, is a detail of the device for straining the wire and holding
40 it taut. Fig. 5, is an edge view of the same device shown in Fig. 4, a part being shown in transverse section.

In the drawings A A' are posts set upright in the ground B. The wires C C are conveniently secured to the initial post A' by being
45 looped thereabout, and are stretched to the post A, through which they pass horizontally in apertures therefor through the post. The number of wires extending horizontally may
50 be more or less as desired. Ordinarily such number is used, and they are placed at such distance apart, as will adapt them to turn

such stock as is to be inclosed in a pasture, whether that stock consists of horses and cattle or of smaller animals such as sheep or
55 hogs. These wires C may extend from an initial post A' only to a comparatively near post A or they may be extended loosely through a number of posts similar to the post A to and through a final post A, provided with devices
60 for straining and securing the wires longitudinally taut. The extending of fence wires through a series of posts is of such common occurrence that it is not deemed necessary to illustrate that feature of constructing a fence.
65

For straining the wires longitudinally and holding them tight, a device shown in Figs. 4 and 5 is provided for each wire. These devices are secured to the post A on that side
70 thereof farthest from the initial post A'. These devices consist severally of a small plate or frame D adapted to be secured by screws or other convenient means permanently to the post in such position with reference to the aperture through which the wire
75 passes, as to receive the wire on the shaft F about which the wire is wound.

The plate D is provided with outwardly projecting lugs G G in which the shaft F has its bearings revolvably. These lugs G G are
80 at a distance apart, and the shaft is provided with fixed collars H H bearing respectively against the inner sides of the lugs G G and preventing the movement of the shaft endwise in its bearings. The plate D is open centrally
85 to permit the wire C to pass through it and to wind on the shaft F between the collars H H. The recesses formed in the lugs G G for the bearings of the shaft are open outwardly, and the shaft is secured in place by staples or
90 stay rods I I about the shaft, the ends of which enter and are secured in the plate D. Other collars K K rigid on the shaft F respectively outside of the staples I I, prevent those staples respectively from being pushed
95 off the end of the shaft or being displaced thereon. The shaft F at one end extends somewhat beyond its bearing in the lug G, and such extension of the shaft is faced or made angular at L whereby it is adapted to
100 receive a crank handle, or wrench, for rotating it, for straining the wire. The shaft is provided with a transverse aperture M between the collars H H, which aperture is

adapted to receive the end of the wire and retain it sufficiently firmly, to prevent the escape of the wire from the shaft, especially after it has been wound about the shaft two or three times. Other apertures N are provided in the shaft transversely thereof in the plane of one of the lugs G, which latter apertures are adapted to receive a pin O, which pin being inserted in the shaft and bearing against the edge of the lug G prevents the rotation of the shaft and the unwinding of the wire therefrom, thus holding the wire longitudinally taut, after it has been sufficiently strained by rotation of the shaft in the other direction.

For the purpose of securing the wires in place against vertical or horizontal displacement between the posts A and A', a number of stay slats or false posts P are woven in among the wires being placed alternately at the right and at the left of each successive wire vertically, and the slats being also alternated with each other with reference to the wires, that is to say, that when the slat No. 1 nearest the post A is placed at the right of the top wire, the second post is placed at the left and the third post at the right, thus alternating in position with reference to the wire, and reversing the positions with reference to the next lower wire, that is to say, the first post passing at the left of the wire, the second post at the right and the third post at the left, and so on across the fence, and longitudinally of the section. Also for further securing these slats in place, they are preferably provided with transverse recesses R on opposite sides of the slat and so as to receive and be supported above the ground by the wires therein, thus preventing them from escaping downwardly by gravity under the movements of the fence caused by the effort of the wind or otherwise.

As the strain on the posts A and A' produced by the straining of the wires C is considerable and tends to pull them over toward each other at the top, we preferably use oblique braces S gained into the posts at the top and set in the ground at the bottom. To prevent

the lower extremities of these braces S from being pushed away from the posts, we use stay rods T which may severally be conveniently made of a strong wire looped about the brace, being received and held in a recess therein, the extremities of the wire being run through the adjacent post and wound upon a wire straining device like that shown in Fig. 4 and hereinbefore described.

As it occasionally occurs that lightning strikes the fence, and the electricity is conducted on the wires thereof, sometimes for a long distance, killing or injuring stock that happens to be near the fence, even though at a considerable distance from the place where the lightning struck the fence, we provide lightning arresters, which severally consist of a wire U, preferably of copper, secured to one of the false posts P, along which it runs vertically contacting with the wires thereon on both sides thereof, and extending down into the ground, whereby electricity running on the fence wire is arrested and discharged harmless into the ground. Such lightning arresters may be used on each division of the fence, and one or more may be applied to such division as deemed desirable.

What we claim as our invention, and desire to secure by Letters Patent, is—

A fence-wire straining device, comprising a plate or frame provided with two laterally projecting lugs having recesses for shaft bearings, a shaft rotatable in the bearings, collars on the shaft bearing against the surface of the lugs and preventing the movement endwise of the shaft, staples about the shaft fixed in the plate retaining the shaft revolvably in its bearings, apertures in the shaft transversely thereof in the plane of a lug, and a pin inserted removably in one of the apertures, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES W. BERKES.
PETER LESCH.

Witnesses:

C. T. BENEDICT,
ANNA V. FAUST.