C. A. Wakefield,

Wire Fence.

No. 112,658. Patented Mar. 14, 1871.

Fig. 2

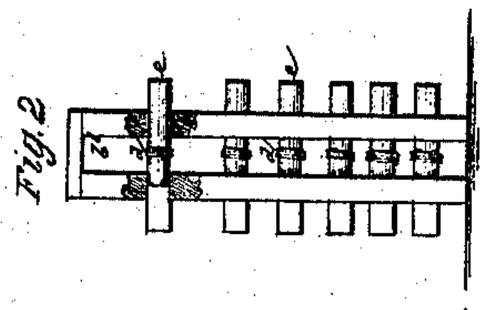


Fig. 3

Fig. 4

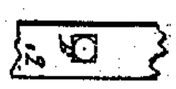
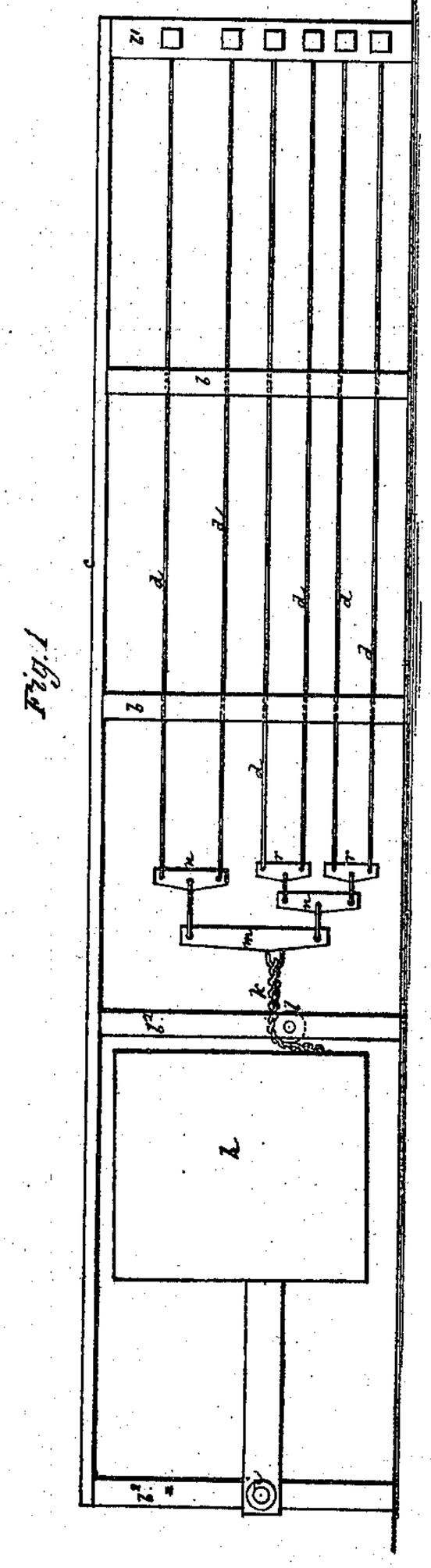


Fig. 1



Witnesses
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CHARLES A. WAKEFIELD, OF PITTSFIELD, MASSACHUSETTS.

Letters Patent No. 112,658, dated March 14, 1871.

IMPROVEMENT IN WIRE FENCES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES A. WAKEFIELD, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Wire Fences, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a longitudinal elevation of a wire fence constructed in accordance with my invention;

Figure 2, an end elevation of the same;

Figure 3, a view in perspective of one of a series of setting or tightening-pins used at the one end of a fence-section; and

Figure 4, an outside face view of the post in part which said pins fit.

Similar letters of reference indicate corresponding parts.

My invention consists in a combination, with a weight for holding the wires at a stretch at the one end of a fence-section, of a series of interposed yokes or levelers connected to operate upon the principle of an equalizing whiffle-tree, and whereby a single weight may be made to hold the several wires at a uniform tension, with every freedom for the wires to adjust themselves to their normal lines when diverted therefrom by thrust; also, whereby the weight that strains on the wires may be arranged wholly above ground, to act alike upon the lower as upon the upper wires.

The invention also consists in a combination of tightening or setting pins at the one end of a fence-section with a straining weight or weights at the opposite end thereof, said pins, to which the wires are attached at their one end, being made capable both of a turning and longitudinal motion in the post which carries them, and being formed with an angular shoulder whereby they may be turned, and which, when the pins are forced inward, fits into an angular recess in the post to lock the pins at their set.

Referring to the accompanying drawing—

b b^1 b^2 represent the posts; and

c, the top railing of the fence; and

d d, its wires.

These wires, which pass freely through the intermediate posts b of each fence-section, are secured at their one end to tightening or setting-pins e, that are fitted transversely through the one end post b^1, which is made double or divided.

Said pins are mainly of a rounded configuration, but with angular shoulders f at their one end, which shoulders fit within similarly-shaped recesses g, to hold the pins from turning after they have been adjusted to set the wires. By slightly drawing on the pins, to release these shoulders from their recesses, the pins may be turned to wind or unwind the wires upon them, as required, the shoulders f serving for the application of a wrench for the purpose.

The opposite ends of the wires d d are subjected to the straining action of a weight or weights, which, while keeping the wires at a stretch, admit of their yielding to and recovering from any thrust thrown upon them to force them out of line, and which provide for the adjusting or setting of the wires by the pins e, free from any liability to breakage. These weights may be variously disposed for the purpose; or a single weight, h, as shown in the drawing, may be made to pull upon the several wires at their free ends, under the arrangement or combination of parts which forms the first part of this invention, and which may be described as follows:

The weight h, which is here shown as arranged between the two posts b^2 b^2, at the one end of the fence-section, may either be carried by a lever pivoted as at i, or be otherwise supported, as, for instance, by chains, wires, or cords and pulleys, or both sides of it, so as to strain upon two lengths of fence, or two fence-sections, at the same time; but it is here only shown as pulling on the wires of a single section by or through a chain, k, passing over a pulley, l, and attached to a main yoke, m, which is connected with a series of secondary yokes or levelers, n, arranged above and below the point of attachment of the chain k to the main yoke, and at equal or unequal distances from such point of attachment, according to the number of wires each leveler is designed to pull upon, and which may be varied. Thus, when the one leveler n acts upon two wires, and the other leveler n upon four, the distances of attachment to the yoke m from the chain k should be as two to one.

When each leveler n is arranged to pull upon but two wires, then the latter may be connected direct to said levelers; but when arranged to draw upon more than two wires, as, for instance, four, then supplementary levelers r r, connected to either primary leveler n, may be used. This system of levelers may be repeated or extended according to the number of wires it is required to connect for operation by a single main yoke, m, the whole operating upon the same principle as that of an equalizing whiffle-tree.

By this combination of yokes and levelers a single weight may be made to strain upon all of the wires in the fence or fence-section, and such weight be arranged wholly above ground; also, the most perfect stretch or hold of the wires is obtained, with every necessary freedom as regards their yielding to or recovering from thrust tending to force them out of a straight line. The uniform tension of the several wires is adjusted by taking them up or letting them

out till the levelers to which they are attached occupy a straight or right-angled position relatively to the wires.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination, with a weight *h* and yoke *m*, to which it is attached, of a series of levelers *n*, or *n* and *r*, for operation on the wires *d*, substantially as specified.

2. In combination with the wires *d*, attached at their one end to a pendent weight or weights, of the adjusting-pins *e*, formed with an annular shoulder, *f*, and the locking recess *g* in the post within which said pins are fitted to turn and slide, essentially as described.

CHAS. A. WAKEFIELD.

Witnesses:

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