

United States Patent Office.

GEORGE FLETCHER, SR., OF GREENSBURG, INDIANA.

Letters Patent No. 84,180, dated November 17, 1868.

IMPROVEMENT IN THE MODE OF MAKING COMBINED WOOD-AND-WIRE FENCE.

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

To whom it may concern:

Be it known that I, GEORGE FLETCHER, Sr., of Greensburg, Decatur county, Indiana, have invented a new and useful Wood-and-Wire Fence; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

The object of my invention is to form a fence composed, for the most part, of poles, saplings, or brushwood, held together by wire attached to suitable posts or trestles, and braced in a peculiar manner, the said fence being of such a character and construction that its parts may be formed by weaving in a suitable loom, such as herein described, and which is the subject of the second part of my invention.

Figure 1 is a perspective view of a portion of my fence in process of construction within the loom.

Figures 2, 3, 5, and 6 are side elevations of different forms of my fence.

Figures 4 and 7 are end elevations of the forms shown in figs. 3 and 6, respectively.

My fence consists essentially of a series of palings, A, which, for economy's sake, I prefer, in most cases, to consist of poles or sticks, such as abound in the debris of new clearings or in the second or under-growth of old ones. These poles may be trimmed to a length, as in figs. 1 and 2, or may be left untrimmed at their upper ends, as in figs. 5 and 6.

The said poles are secured together in a panel, of any desired size, by means of strands, B, of wire woven or interlaced around them, the said wires being so grouped or coupled together as to hold the poles firmly between them, on the principle of a woven fabric.

In order to fabricate this fence, the wires may be stretched on simple tenter-hooks, and the poles inserted consecutively by hand, but, for the sake of greater expedition, accuracy, and cheapness, I prefer to form my said fence by and upon a loom of peculiar construction, and which will be described in the sequel.

A panel, as above described, of proper length, having been prepared, is secured either to posts, C, planted in the ground, or to stone sleepers, D, through the medium of stiles, E, and brace-wires, F, or to suitable triangular trestles, such as are now employed in many forms of portable fences.

The attachment to the posts may be by engaging the wires around nails or studs, c, and to the stiles by simply winding the wire with one or more turns around them, as shown in figs. 3 and 4.

Where the poles are trimmed off to a length, they may have the further finish of a cap, G, and a base-board, H.

For additional security, short posts, I, may be placed at suitable intervals between the main posts, and be attached to the lower course of wires by a staple, i.

The loom employed by me is constructed as follows:

K is a frame, mounted on ground-wheels, L, and having, at one end, a common warp-beam, M, with customary crank *m* and ratchet *m'*. To this beam the wires are attached and wound, said wires being carried forward through a suitable pair of mutually-balanced heddles, N, suspended by bands, O, from opposite sides of two shafts, P P', of which the upper shaft, P, has, outside of the frame, a T-head, *p*, bearing, at its opposite ends, two stirrups, Q Q', for the alternate elevation of the heddles.

R is a batten, showing hooked rods, *r r'*, which engage in notches, S S', in the frame, and are thus suspended either parallel to the heddles or in an oblique position, as shown in fig. 1, so as to enable the consecutive poles to assume a fan-like arrangement, as shown, to adapt the fence to a hill or hollow, as the case may be.

T is a roller, over which the work passes as it becomes finished.

U is a crab, having one or more legs, *u*, and two sharpened anchor-posts, *u'*, for entering the ground.

Projecting upward and rearward from the crab is a series of pins or hooks, *u''*, one for each pair of wires.

V is a knife attached to the frame of the loom, and serving both to sever the superfluous ends of the poles, and as a gauge therefor.

The operation of the above loom is as follows:

A sufficient number of poles being provided, are, with the loom and its described appurtenances, carried to the ground or field upon which it is desired to erect the fence, and wire being wound upon the warp-beam, the respective wires of each pair are drawn through their appropriate heddles, as at 1 and 2, fig. 1, and through their appropriate reeds, *r''*, of the batten. The ends of each pair of wires are then made fast to their proper pin, *u''*, and the heddles being worked by one attendant by means of the stirrups Q Q', so as to open a shed, another, at the proper juncture, trims and inserts a pole, and beats it back to its place by means of the batten R.

I claim herein as new, and of my invention—

1. The mode of constructing a wood-and-wire fence, by means of a stationary crab or anchor, U, and a loom, adapted to be drawn over the ground, in manner substantially as set forth.

2. In the described combination, the suspended and detachable batten R and notches S S, as and for the purpose stated.

3. In this connection, the gauge or knife V upon the frame K.

In testimony of which invention, I hereunto set my hand.

GEORGE FLETCHER, SR.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.