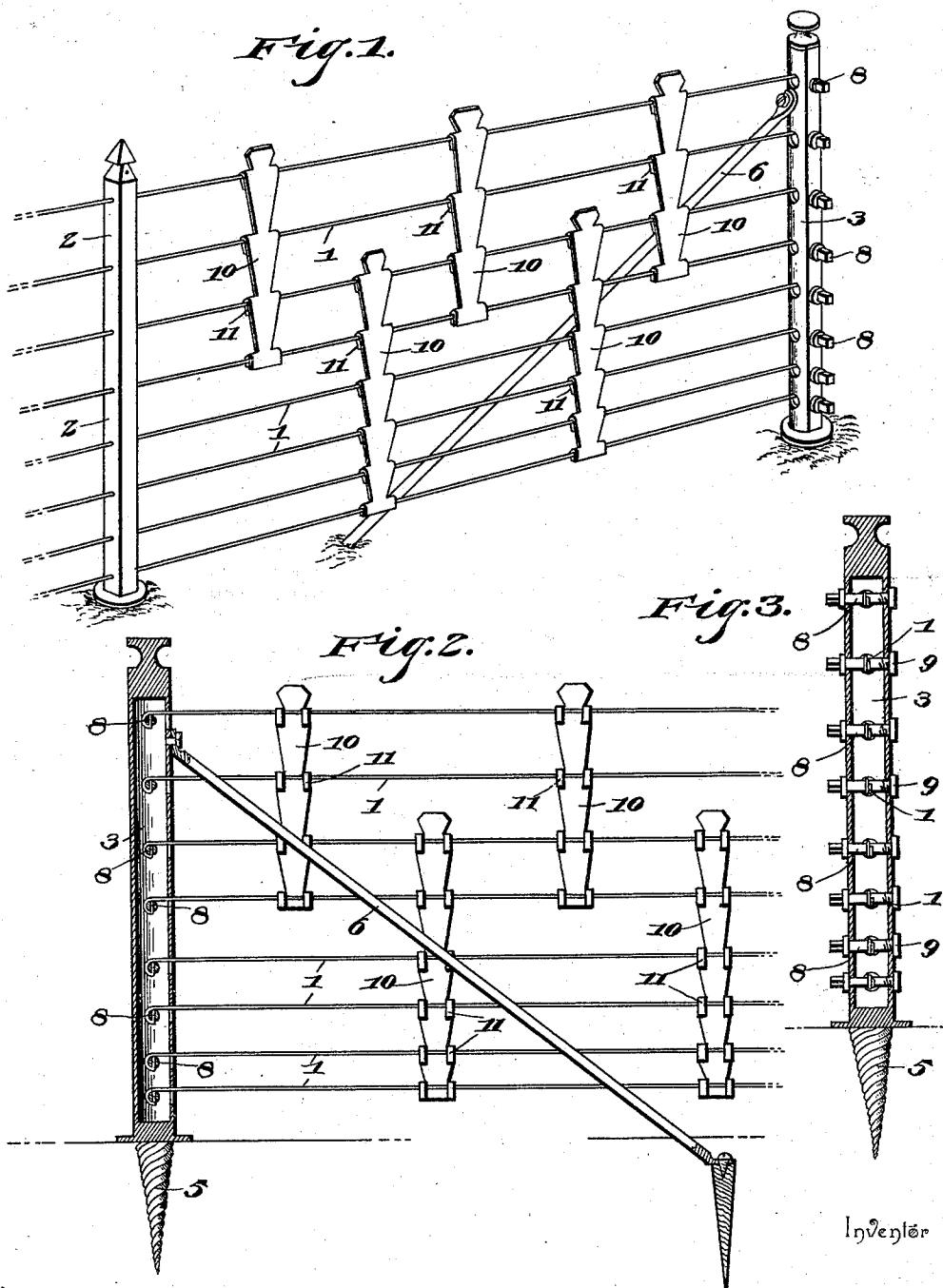


(No Model.)

W. CULVEYHOUSE.  
WIRE FENCE.

No. 547,421.

Patented Oct. 8, 1895.



Inventor

Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM CULVEYHOUSE, OF BELLEFONTE, PENNSYLVANIA.

## WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 547,421, dated October 8, 1895.

Application filed May 8, 1894. Serial No. 510,512. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM CULVEYHOUSE, a citizen of the United States, residing at Bellefonte, in the county of Center and State of Pennsylvania, have invented a new and useful Wire Fence, of which the following is a specification.

My invention relates to wire fences, and particularly to stays employed in connection with the runners to hold the latter at the desired intervals and distribute the strain applied to one of the runners throughout those located between contiguous posts; and the object in view is to provide a stay which may be manufactured at small cost and applied with facility to the runners with the minimum expenditure of time and labor; and, furthermore, to provide a stay which may be struck from a parallel-sided strip of sheet metal and have a bearing upon each runner equal to the maximum width of the strip from which the stay is struck, the means for securing the stay to the runners being integral with the stay and formed within the contour, two clips or means of attachment being provided upon each stay for each wire or runner of the fence, whereby twisting or deflection of the stay when arranged upon the runners is prevented.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a fence provided with stays constructed in accordance with my invention. Fig. 2 is a side view, partly in section, of the same, showing the opposite sides of the stays. Fig. 3 is a vertical section of a post preferably employed in connection with a fence provided with the improved stays.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates wire runners, which extend through an intermediate post 2 and into a hollow terminal post 3, said terminal post being provided with openings communicating with the interior or bore thereof. Mounted in suitable bearings in the terminal post at right angles to the fence-runners and equal in number thereto are spools 8, to which the ex-

tremities of the runners are secured, said spools being provided at one end outside of the post with wrench or key seats and being fitted at the other end with lock-nuts 9, by which the spools are secured at the desired adjustment to maintain the proper tension in the runners. The posts are provided at their lower ends with downwardly-tapered or conical anchors 5, having threaded surfaces whereby they may be firmly secured in the soil, and the terminal posts are provided with braces 6 to prevent the strain of the runners from deflecting the same out of their proper vertical positions.

Arranged upon and connecting the runners at intervals are the stays 10, which are struck from sheet metal, each stay preferably connecting three or more runners. In the construction illustrated in the drawings, the upper stays connect the upper runners and the lower stays connect the lower runners, the fence illustrated being provided with eight runners, whereby the lower ends of the upper stays extend below the upper ends of the lower stays and the intermediate runners are connected to both the upper and lower stays. The object of this construction is to insure the transmission of strain applied to the lower runners of the fence through the lower and upper stays to the upper runners, and the transmission of strain from the upper to the lower runners.

The construction of all the stays is identical, and hence the description of the construction of one will be sufficient. The stay comprises a series of downwardly-tapered sections, which, at their upper ends, are equal in width to the blank from which the stay is struck and at their lower ends are integrally connected to the centers of the upper or enlarged ends of the next lower sections, the tongues 11, which are formed by tapering the sections toward their lower extremities, being together equal to the difference between the width of the lower or reduced end of a section and the upper or enlarged end of the section. These tongues are integral with the upper or enlarged ends of the sections and are arranged, respectively, upon opposite sides of the reduced lower ends of the next upper section. The tongues 11 are bent downward parallel with the plane of the body portion of the

stay, said body portion being flat throughout, and the lengths of the sections of the stay from the upper or enlarged end of one section to the corresponding end of the next section are equal, respectively, to the intervals between the contiguous runners of the fence, and as the tongues are bent downward at their point of connection with the upper ends of the sections and engage over the runners it will be seen that the runners bear against the upper or broadest portions of the sections, and hence the stays have a bearing upon each runner which is equal in width with the broadest portion of the stay and equal in width with the blank from which the stay is struck. Furthermore, the tongues are arranged at the outer or lateral edges of the upper or enlarged ends of the sections, and hence are spaced apart a distance equal to the lower or reduced ends of the sections, and hence lateral vibration or twisting of the stay is prevented. The tongues are folded flat against the body portions of the sections of the stay, and they may be arranged permanently to secure the stays by striking their free ends below the planes of the runners to close the intervals between the body portion of the stays and the contiguous surfaces of the tongues through which the runners are passed in applying the stay to the fence. Owing to the fact that the tongues are thus flattened against the body portion of the stay projections from the plane of the stay are avoided, thereby providing a barbless stay suitable for use in connection with an ornamental fence, and furthermore, when necessary, a stay may be removed from the fence by separating the extremities of the tongues slightly from the plane of the body portion of the stay to release the runners.

A further advantage of the improved stay resides in the fact that if for any reason the

intervals between the upper extremities of the sections do not agree with the intervals between the runners the tongues may be lengthened if the intervals between the upper ends of the sections are greater than those between the runners, or the tongues may be bent above their points of connection with the sections if the intervals between said upper ends of the sections are less than those between the runners.

Having described my invention, what I claim is—

In a fence, the combination with runners, of the herein-described flat barbless stay struck from a blank of sheet metal, intersecting a plurality of fence runners and comprising a series of integral downwardly tapered sections equal in length, respectively, with the intervals between the runners, and pairs of integral downturned tongues located at the upper enlarged ends of the sections, respectively, upon opposite sides of the lower reduced ends of the contiguous connected upper sections, whereby the lower end of each section connects with the enlarged upper end of the next lower section between the tongues at the upper end of said lower section, the tongues being arranged parallel with the plane of the body portion of the stay and extending over the fence runners, whereby the fence runners bear against the stay at its broadest points below the origin of the tongues and each runner is engaged by duplicate tongues, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM CULVEYHOUSE.

Witnesses:

JOHN CURTIS JOHNSON,  
EDWARD BROWN, Jr.