(No Model.)

E. L. & J. S. WILLIAMS.

WIRE TIGHTENER.

No. 542,668. Patented July 16, 1895.

Fig. 1

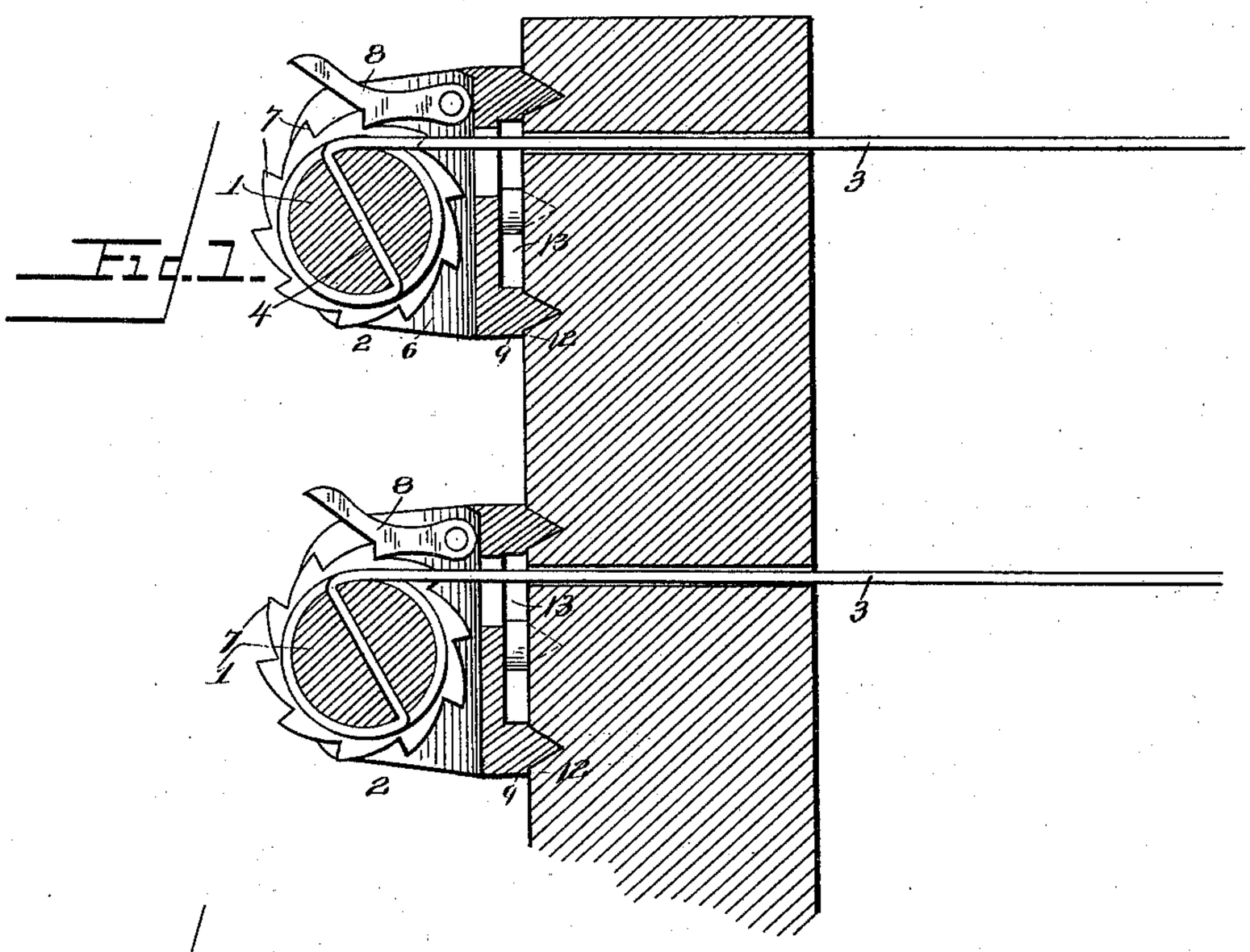


Fig. 2

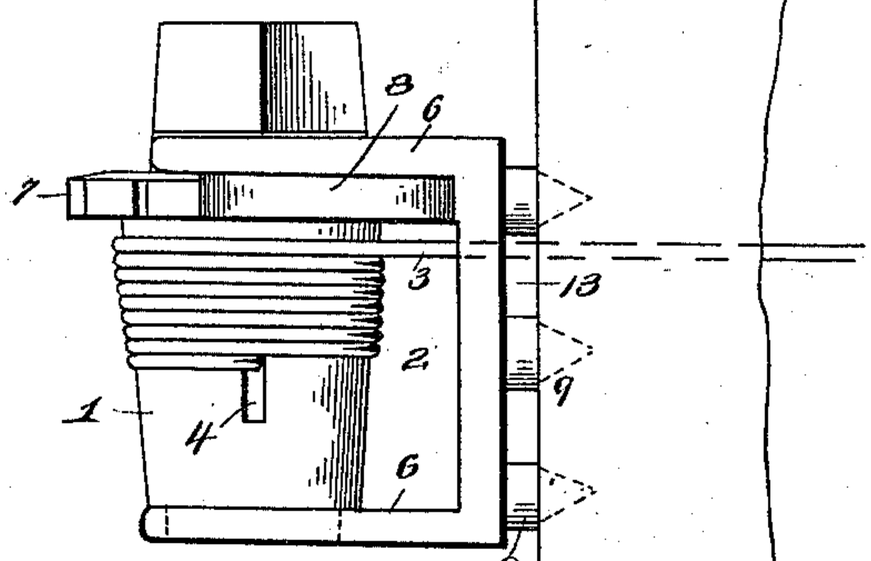


Fig. 3

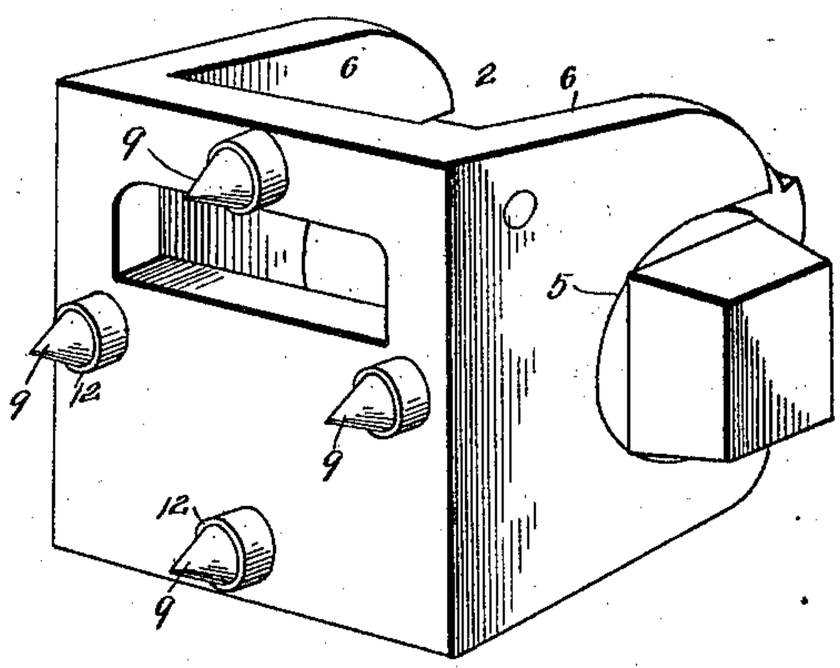
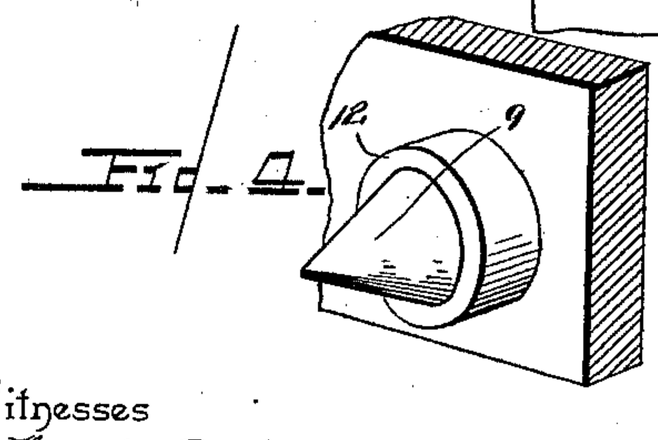


Fig. 4



Witnesses
Thos W Riley
H. C. Riley

Inventors
Eugene L. Williams.
and
John S. Williams.

By their Attorneys.
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

EUGENE L. WILLIAMS AND JOHN S. WILLIAMS, OF JERSEYVILLE, ILLINOIS.

WIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 542,668, dated July 16, 1895.

Application filed October 10, 1894. Serial No. 525,518. (No model.)

To all whom it may concern:

Be it known that we, EUGENE L. WILLIAMS and JOHN S. WILLIAMS, citizens of the United States, residing at Jerseyville, in the county of Jersey and State of Illinois, have invented a new and useful Wire-Tightener, of which the following is a specification.

The invention relates to improvements in wire-tighteners.

The object of the present invention is to improve the construction of wire-tighteners, and to provide a simple and inexpensive one which may be readily attached to and removed from a fence-post, and which will permit a circulation of air between it and the post and allow water to pass freely back of it to avoid rotting the post.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings, Figure 1 is a vertical sectional view of a post provided with wire-tighteners constructed in accordance with this invention. Fig. 2 is a plan view of the same. Fig. 3 is a detail perspective view of one of the wire-tighteners. Fig. 4 is a detail perspective view of one of the spurs.

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

1 designates a shaft or drum journaled in a bearing-bracket or frame 2 and having a fence-wire 3 connected to it by being passed through a central slot or opening 4. One end of the shaft or drum is extended beyond the bearing-bracket or frame and is squared or polygonal to adapt it to receive a wrench for rotating the shaft or drum to tighten the wire to the desired tension. The shaft or drum is journaled in bearing-recesses 5 of the sides 6 of the bearing-bracket or frame. It has a shoulder at one end to prevent longitudinal movement, and it is provided with a ratchet-wheel or teeth 7, located adjacent to the inner face of the opposite side of the bearing-bracket or frame and adapted to be engaged by a pivoted gravity pawl or dog 8 to prevent retrograde rotation of the shaft or drum and a consequent loosening of the fence-wire.

The bearing-bracket or frame is offset from the post by spurs 9 to form an intervening space for the circulation of air and to permit free drainage to prevent accumulation of moisture and to avoid rotting the fence-post. Any number of spurs may be employed, and they are formed integral with the bracket or frame. Each spur has a tapering point and is provided at the base thereof with an annular enlargement 12, forming an outer shoulder adapted to limit the penetration of the spur and to offset the bracket or frame from the post to provide the said intervening space 13. The points penetrate the post and become embedded in the same by the tension of the fence-wire which passes through a perforation of the post, and it will be readily apparent that the spurs securely hold the wire-tightener in proper position on the post and permit it to be readily removed when it is desired to replace an old post by a new one.

The back of the frame or bearing-bracket is provided with an enlarged opening for the passage of the wire, and which also facilitates the circulation of air and the quick drying of that portion of the post covered by the wire-stretcher.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What we claim is—

1. A wire stretcher adapted to be held against a fence-post by the tension of a fence-wire, and provided at its back with spurs adapted to engage a post, said spurs having tapering points and at the bases thereof enlargements forming stops, limiting the penetration of the points and forming an intervening space between the wire stretcher and the post, substantially as and for the purpose described.

2. The combination of a frame, provided with integral spurs having tapering points, and at the bases of the points enlargements forming stops to limit their penetration and to offset the frame from a post; a shaft journaled in the frame, and a pawl and ratchet for holding the shaft against retrograde rotation, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

EUGENE L. WILLIAMS.
JOHN S. WILLIAMS.

Witnesses:
W. S. PITTMAN,
J. A. FLAUTT.