

(No Model.)

G. P. ROSE.

LAG SCREW,

No. 408,751.

Patented Aug. 13, 1889.

Fig. 1

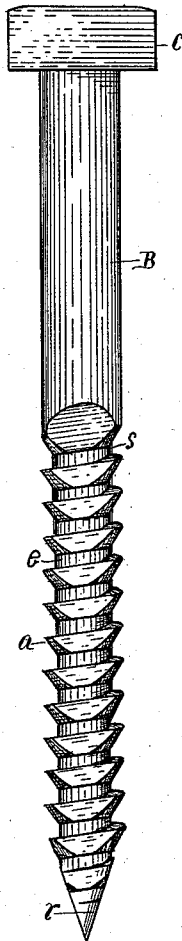
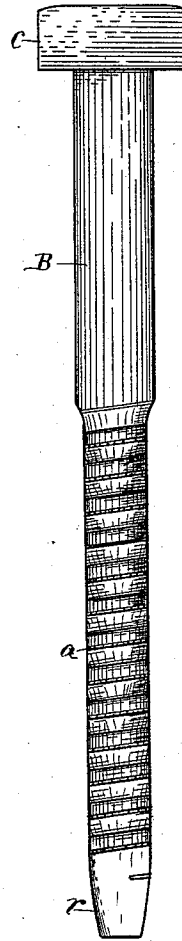


Fig. 2



Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE PAYNE ROSE, OF FENTON, MICHIGAN.

LAG-SCREW.

SPECIFICATION forming part of Letters Patent No. 408,751, dated August 13, 1889.

Application filed November 21, 1888. Serial No. 291,434. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PAYNE ROSE, a citizen of the United States, residing at Fenton, county of Genesee, State of Michigan, have invented a new and useful Lag-Screw, of which the following is a specification.

The object of this invention is to construct a lag-screw having a peculiarly-constructed threaded portion above the point and a head shaped angular to form a wrench-seat, as below set forth and claimed.

In the drawings forming a part of this specification, Figure 1 is a side elevation looking from a point at the right of Fig. 2, and Fig. 2 is an elevation looking from a point at the left of Fig. 1.

Referring to the letters marked on the drawings, B is the lag-screw, having an angular head *c* and a long plain body portion below said head, forming a bearing in the wood when the screw is turned, and a screw-threaded portion flattened on two opposite sides below the plain body portion.

The threaded part *e* of the lag-screw is in the main circular in cross-section, but has flattened sides. The spiral threads *a* are thus on two opposite sides only, the other two opposite sides being flat, as in Figs. 1 and 2. The surfaces between the separated threads of the portion *e* for the most part at least are vertically straight. However, said screw-threaded body *e* may be greater in diameter at the upper end S, and from thence gradually taper for a short distance, as in Fig. 1, to give greater strength at this point; but this is a matter of choice. The upper faces of the threads are at right angles to the body *e* and beveled on the under side.

The point of the lag-screw is wedge-shaped with two diagonally-opposite edges chamfered off at *r r* to facilitate turning after the lag-screw is driven. The lower end may be conical-pointed, instead of wedge-shaped, if preferred.

In the use of the lag-screw it is driven like a nail with a hammer, the long way of the wedge end being crosswise of the grain of the wood into which it is driven. The lag-screw is then given a quarter-turn with a wrench, which action takes the threads *a* out of the wood broomed by them when driving the lag-screw, and forces them into the solid wood, which was at the flat sides before the lag-screw was turned. By the expression "broomed" I mean the condition of the wood on the threaded sides of the lag-screw, which is broken and left splintered or ragged by the threads being forced through the wood when the screw is driven with a hammer. This action is not here shown, but will be readily understood.

It will be observed that in Fig. 1 the grooving of the threads extends onto the beveled part of the wedge-point. This facilitates turning the lag-screw after it is driven.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A lag-screw having a square head for the attachment of a wrench thereto, said screw being flattened and having threads on two opposite sides, the upper sides of said threads being at right angles to the screw-body and having vertically-straight intermediate surfaces between the threads, a cross-section of the body through said surfaces being circular in cross-section, and the body having a bearing portion between the upper thread and the head circular in cross-section, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

GEORGE PAYNE ROSE.

Witnesses:

ARTHUR M. RAISOM,
J. L. HAWES.