

(No Model.)

A. COLLET.
TOOL FOR SCREWING TREENAILS.

No. 587,645.

Patented Aug. 3, 1897.

FIG.1 -

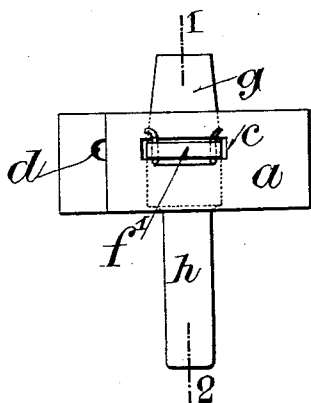


FIG.2 -

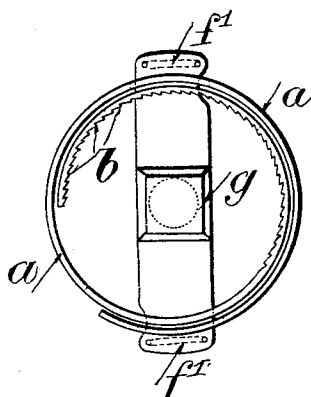


FIG.6 -

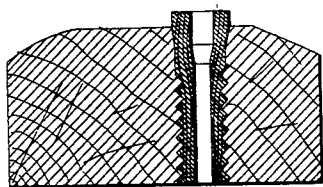


FIG.3 -

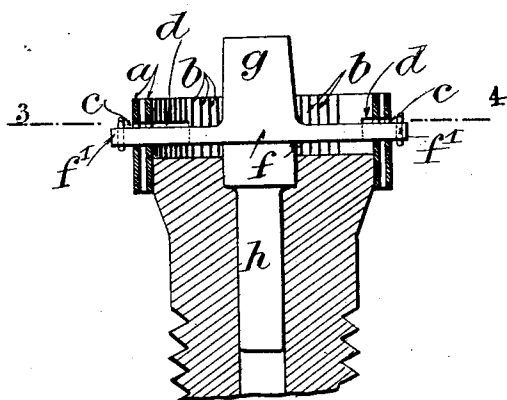


FIG.4 -

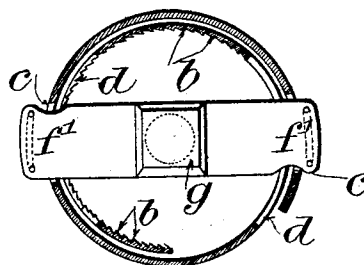
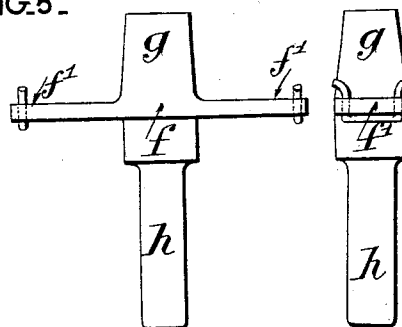


FIG.5 -



INVENTOR:

WITNESSES
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[Signature]

UNITED STATES PATENT OFFICE.

ALBERT COLLET, OF PARIS, FRANCE.

TOOL FOR SCREWING TREENAILS.

SPECIFICATION forming part of Letters Patent No. 587,645, dated August 3, 1897.

Application filed April 1, 1897. Serial No. 630,215. (No model.) Patented in France August 5, 1895, No. 249,406.

To all whom it may concern:

Be it known that I, ALBERT COLLET, civil engineer, of No. 2 Rue de Berne, Paris, in the Republic of France, have invented new
5 Improvements in Tools for Screwing Treenails in Railway-Sleepers or in other Similar Operations, (for which I have obtained Letters Patent of France for fifteen years, No. 249,406, dated August 5, 1895;) and I do hereby declare that the following is a full and exact
10 description thereof, reference being made to the accompanying drawings.

My invention relates to an improved tool more particularly designed for screwing
15 screw-threaded hard-wood or composition treenails into railway-sleepers at the spot where the screws, cramps, or spikes are to be fastened, but which may be also used for screwing any screw-threaded piece into a hole
20 correspondingly screw-cut.

In the accompanying drawings, Figure 1 is a side view of the tool. Fig. 2 is a plan of the same. Fig. 3 is a longitudinal section on the line 1 2 of Fig. 1. Fig. 4 represents a
25 horizontal section on the line 3 4 of Fig. 3. Fig. 5 shows the lever of the screwing-tool in elevation and in side view, and Fig. 6 is a cross-section of a railway-sleeper after the treenail has been screwed.

30 My system of tool for screwing treenails into railway-sleepers or for the screwing of any threaded piece in general produces during its rotation a most energetic pression on the head of the treenail or other piece to be screwed.

35 The said tool is formed by a kind of brake-strap *a*, provided with vertical teeth or indentations *b* on the inner face of its first convolution. This strap has horizontal openings or slots *c c d d*, which are much longer for
40 the inner than the outer spire. Into these openings or slots are engaged the ends or arms *f'* of a lever or cross-piece *f*, provided at its middle and on its upper face with a boss *g*, square in cross-section, and on which
45 fits the operating-key, and on its inner face with a vertical rod *h*, which descends into the hole in the treenail, and thus serves to center the screwing-tool on the head of the said treenail.

50 By giving the key, and consequently the lever *f*, a movement of rotation in the proper

direction the brake-strap *a*, which embraces the head of the treenail, bites into the said head, for the inner spire is locked by the indentations *b*, while the outer spire is carried
55 forward by the lever and contracts after the manner of a brake strap or collar. The further movement of the key causes the screwing-tool to carry the treenail forward and screws it into the sleeper. By turning in the
60 other direction the strap *a* opens out and turns freely on the treenail without being interfered with by the indentations *b*.

I claim—

1. The combination of a helical band having openings run through it in a transverse
65 line, and a cross-head extending through the said opening, the openings of the inner convolutions of the helices being longer than the openings of the outer convolution whereby to
70 enlarge and contract the band according to the direction in which the cross-head is turned.

2. The combination of a flat band having the form of a helix or volute and having open-
75 ings therein, the openings being arranged in transverse registry, and an arm passed through the openings, the band having a portion projected laterally beyond the arms.

3. The combination of a flat band having
8c the form of a helix or volute, a head located within the band, arms carried by the head and projecting outward from the band and engaged therewith, the band having a portion projecting beyond the arms and a rod
85 carried by the head and extending downward therefrom.

4. The combination of a flat band having the form of a helix or volute and having open-
90 ings therein, the opening in the outer convolution being smaller than the remaining openings, and an arm passed through the openings and enlarging and contracting the band by engagement with the walls of the open-
95 ings therein the band having a portion projected laterally beyond the arm.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ALBERT COLLET.

Witnesses:

GEORGES BORDEAU,
EDWARD P. MACLEAN.