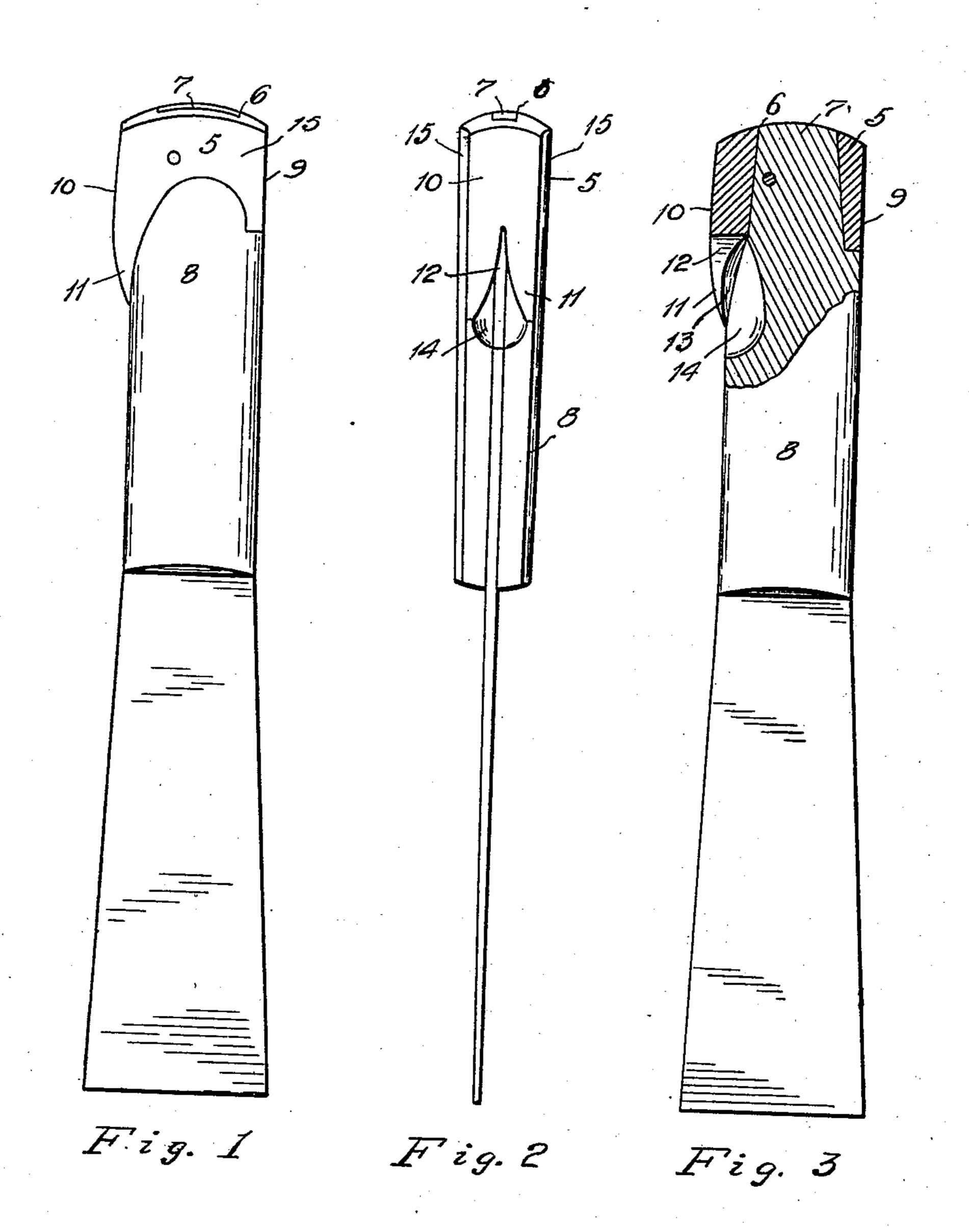
No. 860,593.

PATENTED JULY 16, 1907.

N. C. CHRISTENSEN. TOOL ATTACHMENT. APPLICATION FILED NOV. 30, 1906.



WITNESSES: 10 13 19
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Nels C. Christensen

BY

Dierre Barner

ATTORNEY

UNITED STATES PATENT OFFICE.

NELS C. CHRISTENSEN, OF TACOMA, WASHINGTON.

TOOL ATTACHMENT.

No. 860,593.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed November 30, 1906. Serial No. 345,784,

To all whom it may concern:

Be it known that I, Nels C. Christensen, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented cer-5 tain new and useful Improvements in Tool Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to mechanic's tools, and its object is to provide for use upon the end of a bar or han-10 dle a ferrule so formed and arranged as to serve not only for strengthening and preventing its splitting but which is likewise suitable to be employed for driving or extracting nails from work of various kinds.

With these ends in view the invention consists of the 15 peculiar construction and combination of features in a handle ferrule, as will be hereafter described and claimed.

In said drawings, Figure 1 is a side elevation of a tool device embodying my invention and shown attached 20 to the handle of a putty knife; Fig. 2, a front elevation of the same; Fig. 3, a similar view to Fig. 1 excepting that the present invention and a portion of the handle are shown in section; and Fig. 4, a perspective view of the invention, shown detached.

The reference numeral 5 designates the ferrule proper, having its socket 6 elongated so that the tenon 7 therefor of the tool handle 8 may be reduced as little as possible. The ferrule is provided at one end with a flat hammer-face 9, which is desirably roughened as in-30 dicated in Fig. 4; and the opposite side 10 is extended

down and bifurcated to furnish a claw 11. The vshaped notch 12 has its opposing faces 13 inclined from a medial plane in order that a nail in the act of being drawn will be wedged between the claws and be more 35 reliably engaged than would otherwise be the case. A

cavity 14 is provided in the handle to the rear of the claws and is extended sufficiently therebelow to allow the heads of nails being entered the claw from that end.

The outer faces of the ferrule ends, and sides 15 are desirably formed to merge or be flush with the adjoin- 40 ing faces of the handle, and the face 10 is curved to furnish a fulcrum bearing which will not mutilate the work however great the pressure exerted in drawing a nail.

The operations of the device are obvious from the 45 foregoing.

The invention is characterized in its adaptability for use with various tools where compactness is the desideratum and oftentimes a necessity, and permits of its use in combination with other tools, such for ex- 50 ample, as the putty-knife illustrated in the drawings.

What I claim is—

1. In combination with an operating handle having a cavity therein adjacent its outer end, a ferrule received over said end of the handle and formed with a claw which 55 extends inwardly to directly overlie said cavity, the extremities of said claw terminating at points above the lower end of said cavity, the side of said ferrule above said claws being substantially straight and extending laterally beyond said handle.

2. In combination with an operating handle having a cavity therein at a point below its outer end, a ferrule received over said outer end and formed with a claw whose side portions overlie said cavity and whose extremities are arranged along the sides thereof and which terminates in- 65 termediate the length of said cavity, the under sides of said claws being concaved.

In testimony whereof I affix my signature in presence of two witnesses.

NELS C. CHRISTENSEN.

Witnesses:

GUSTAV BEUTLICH,