A. LINDSTROM.

NAIL SET OR PUNCH.

APPLICATION FILED NOV. 22, 1920.

1,378,698. Patented May 17, 1921.

Fig. 1.

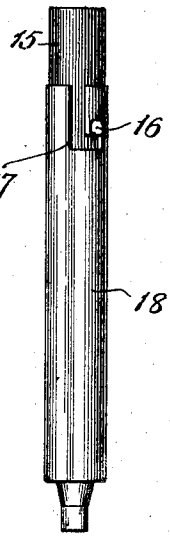


Fig. 2.

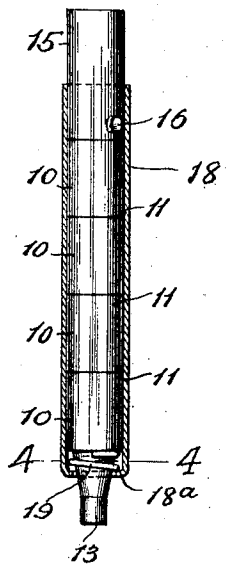


Fig. 3.

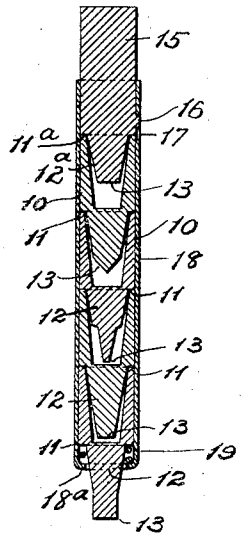


Fig. 4.

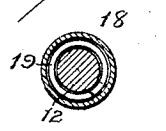
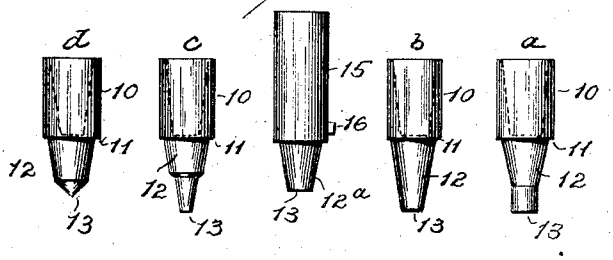


Fig. 5.



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NAIL-SET OR PUNCH.

1,378,698. Specification of Letters Patent. Patented May 17, 1921.

Application filed November 22, 1920. Serial No. 425,791.

To all whom it may concern:

Be it known that I, ARTHUR LINDSTROM, a citizen of the United States, and a resident of South Bellingham, in the county of Whatcom and State of Washington, have invented certain new and useful Improvements in Nail-Sets or Punches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in a nail set or punch, the object being to provide a device of the character described made up of a series of interchangeable sections each provided with a nail engaging point and one preferably with a center punch point, the series being held together by a sleeve movable relatively to the sections so as to protect the hand of a user and absorb the shock of the hammer striking the head of the set.

With these objects in view my invention consists in a nail set composed of a series of interchangeable disconnected sections each provided with a point for engagement with the head of a nail.

A further object is to provide a series of interchangeable sections with means for detachably holding them in assembled position.

A further object is to provide a series of interchangeable sections with means for detachably connecting them and for absorbing the shock of the hammer blows on the head of the set.

In the accompanying drawings; Figure 1 is a view in elevation of my improvement; Fig. 2 is a similar view, the sleeve being in section; Fig. 3 is a vertical longitudinal section of Fig. 1; Fig. 4 is a view in transverse section on the line 4—4 of Fig. 2 and Fig. 5 shows the head and several sections of the set disconnected.

The set or punch is made up of a series of sections which are alike except as to the size and shape of the point. Each nail set or punch section consists of a body 10 having a peripheral shoulder 11, a conical section 12 immediately below each shoulder and a point 13 the latter varying in size so that one section *a* would be adapted for one size, say an eight penny nail, the section *b* for a six penny nail, the section *c* for a still smaller nail and the section *d* ground to a point to form a center punch.

In the section *b* the conical part 12 is continuous to the point of the nail, whereas in the other sections the diameter of the conical portion 12 is reduced so as to provide the proper size end without elongating the conical portion of the section. The body 10 of each section is recessed or made hollow to receive the free end and cone of another section; and the recess is preferably of such length that there will be no contact between the smaller free ends of the sections and the floor or bottom of the recess as shown in Fig. 3, and the conical parts of the section have a loose fit within the recesses of the companion sections, so that there can be no sticking or wedging of the parts, but on the contrary the fit is loose so that they may be readily reassembled.

15 is the head section preferably made solid as shown and provided with a conical end 12^a to fit within the recess in the section next below. This head is provided at its periphery and near its shoulder 11^a, with a lug 16 which latter is adapted to enter a slot 17 in the sleeve 18. This sleeve is shorter than the length of the sections and head when assembled, so that the head 15 and the end or point 13 of one of the sections will project respectively above and below the sleeve. The slot 17 is constructed as shown in Fig. 1 so as to form, with lug 16, a bayonet joint connection which holds the head and sections assembled within the sleeve but permits of the ready removal of the sleeve for the readjustment of the section. The lower end of the sleeve is provided with an inwardly projecting flange 18^a which forms a seat for the coiled spring 19 on which the shoulder 11 of the lower section rests, the spring being readily compressible so as to permit the lug 16 to be removed from the slot 17 of the sleeve.

The sections *a*—*b*—*c* and *d* may be assembled in any order desired and when assembled and placed within the sleeve the pointed end 13 of the lowest section projects below the sleeve. By now introducing the head 15, with the lug thereon in line with the vertical member of the slot 17 and pushing down on the head, the spring will be com-

pressed sufficiently to permit the lug to enter the horizontal portion of the slot and then by releasing the pressure the spring will force the lug 16 into its seat in the sleeve.

The sleeve thus protects and conceals the sections except the point of the lower one, and the sections being in contact with the head form a rigid punch or set with the head projecting sufficiently to receive the hammer blows.

In operation the sleeve is grasped by the hand and when the head 15 is struck by a hammer, the spring absorbs the shock and prevents it from being transmitted to the hand even if the latter be grasping the sleeve tightly.

With this construction the sleeve can be readily and quickly removed from the sections thus leaving the latter free to be reassembled in the sleeve with any one of the sections projecting at the lower end of the latter.

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but

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

1. The combination of a series of interchangeable tool sections each having a characteristic tool end and all coöperating simultaneously to form an effective tool, and means independent of the said sections for holding them in assembled position with the smaller end of one section projecting beyond said holding means.

2. The combination of a series of tool sections each having a characteristic tool end and all coöperating simultaneously to form an effective tool, a head section and a sleeve embracing all of the sections and open at both ends, the opening at the lower end being reduced for the passage of the tool end of a section, and means for detachably connecting the sleeve and head.

3. The combination of a series of tool sections each having a characteristic tool end and all coöperating simultaneously to form an effective tool, a head section and a sleeve embracing all of the sections and open at both ends, the opening at the lower end being reduced for the passage of the tool end of a section, and a slot and lug connection between the head and sleeve whereby the head and all the tool sections are locked within the sleeve.

4. The combination of a series of tool sections each having a characteristic tool end, a recessed body and a shoulder between the tool end and body, the tool ends of each upper section resting within the recessed body of the section next below and the shoulder of each upper section resting on the upper end of the body next below, a head section having a reduced end to fit within the recessed body of the top section and having a shoulder engaging the end of the body of said top section, all of said tool sections and head coöperating to form an effective tool, rigid from end to end, and a sleeve embracing the tool sections and head, and engaging the lower section and head for holding the parts in assembled position.

5. The combination of a series of tool sections each having a characteristic tool end and a recessed body whereby they may be interchangeably nested with the tool end of one section within the recessed body of the section next below and all coöperating simultaneously to form an effective tool, a head section, a sleeve open at both ends, a spring within the sleeve and forming a seat for the lowermost section and means for detachably securing the head to the sleeve.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

ARTHUR LINDSTROM.

Witnesses:
H. P. ROBERTS,
P. J. SNYDER.