

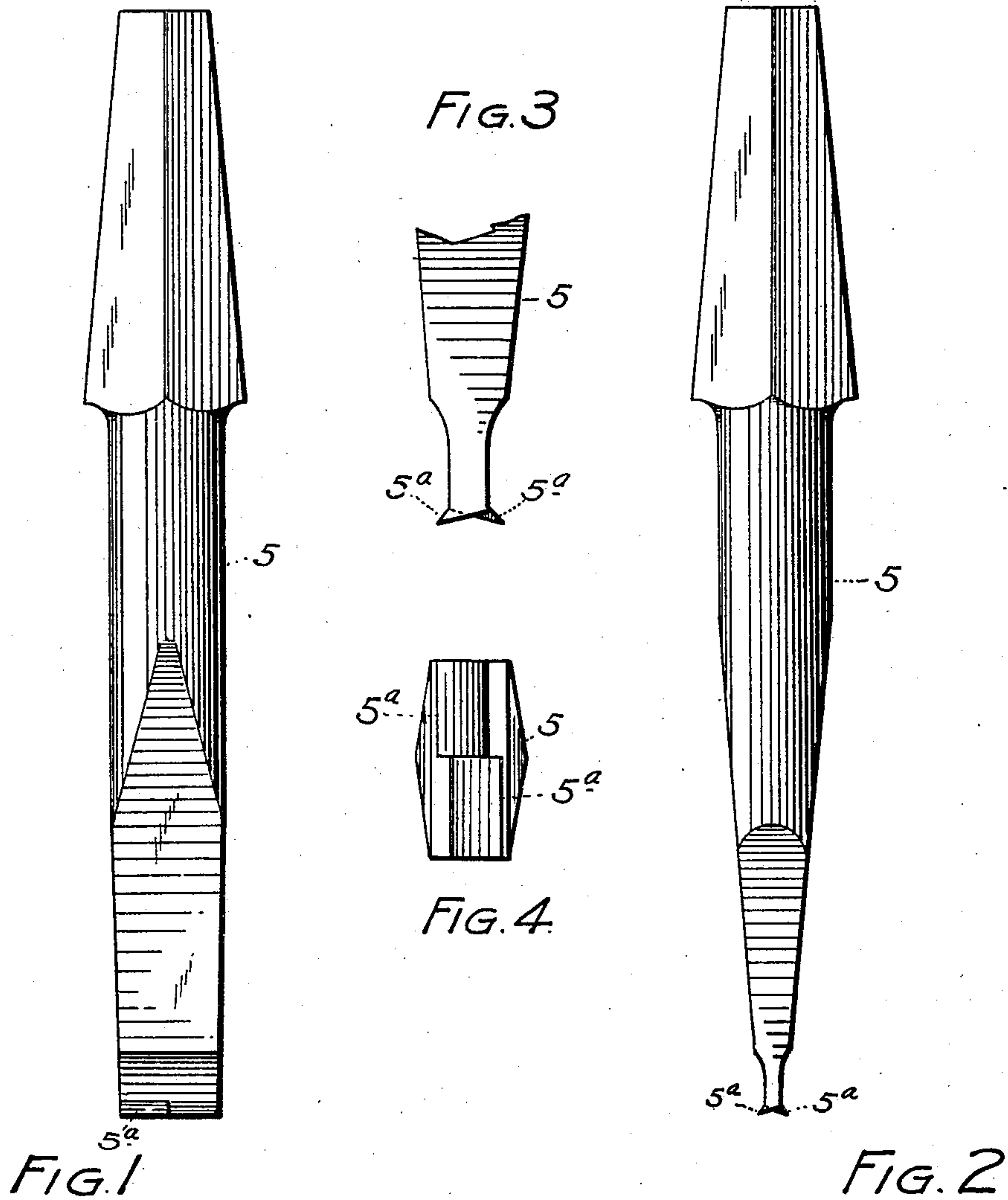
No. 685,197.

Patented Oct. 22, 1901.

J. N. BARNES.  
SCREW DRIVER.

(Application filed Apr. 10, 1900.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

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## SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 685,197, dated October 22, 1901.

Application filed April 10, 1900. Serial No. 12,385. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH NEWIL BARNES, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Screw-Drivers; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in screw-drivers, my object being to prevent the instrument from slipping out of the nick or groove in the head of the screw during the driving or removing operation.

It is well known by those accustomed to the use of screw-drivers of ordinary construction that the tool often slips out of the nick in the screw, particularly when the screw is somewhat difficult to turn, as during the last few turns in driving the screw or in starting the screw in taking it out, and especially if the nick or groove of the screw or the tip of the screw-driver is in the least worn. These difficulties become quite serious in hard-wood work, as the slipping of the instrument results in scratches or disfigurement, which cannot be removed from a hard-wood surface.

My improved screw-driver will now be described in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a side view of my improved screw-driver. Fig. 2 is a similar view turned at right angles to Fig. 1. Fig. 3 is a fragmentary view showing the device in the same position as Fig. 2, but very much enlarged. Fig. 4 is an end view of the same.

Similar reference characters indicate corresponding parts in the views.

Let the numeral 5 designate the body of the screw-driver. This body portion may be of any suitable construction.

My invention concerns only the point or that portion of the instrument adapted to enter the nick or groove of the screw. This nick-engaging part of the instrument is pro-

vided with projections 5<sup>a</sup>, extending laterally in opposite directions, these projections being made sufficiently sharp to cause them to bite or be pressed into the wall of the screw-nick on opposite sides sufficiently to prevent the tool from slipping out of the nick. These lateral projections may be of any suitable construction adapted to perform the function stated.

As shown in the drawings, the instrument has a sort of tooth 5<sup>a</sup> extending half the width of the blade in one direction and another similar tooth extending half the width of the blade in the opposite direction, the other half of the blade on each side being plain or straight. It is evident that with this construction the two oppositely-disposed teeth will bite the opposite walls of the screw-nick during the operation of turning the screw, and thus prevent the instrument from slipping. As soon as the turning or driving force ceases to act the instrument may be removed from the nick of the screw-head in the same manner as the ordinary screw-driver.

As less force is required to remove the screw than in driving it, an instrument of this construction may be employed for both purposes instead of making the one-half of the blade plain or straight, as shown, and may be of any other construction desired.

If it is desired to use an instrument of this specific construction in removing a screw and have the same advantage as during the driving operation, it would be constructed the reverse of the instrument employed in driving the screw—that is to say, the teeth would be so disposed as to bite the wall of the screw-nick during the reverse turning movement. In this case one instrument would be required in driving the screw and another instrument in removing it.

The instrument may be made of any suitable material; but it is evident that the material of which the nick-engaging part of the instrument is made should be harder than the material of which the screw is made. It would be best to use a high grade of steel for the entire instrument and properly temper the nick-engaging part of it.

It must be understood that I do not limit the invention to the details of construction



herein shown, as I am aware that many modifications may be employed without departing from the spirit of the invention.

5 Having thus described my invention, what I claim is—

10 As an improved article of manufacture, a screw-driver whose screw-niche-engaging part has a tooth extending laterally beyond the plane of the body of the blade in one direction, and having a length equal to a portion of the width of the blade, and another simi-

lar tooth extending laterally beyond the body of the blade in the opposite direction, and having a length equal to a portion of the width of the blade, the portion of the blade opposite the tooth on each side being plain or straight. 15

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

JOSEPH NEWIL BARNES.

Witnesses:

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GRACE MYTINGER.