

A. LOEWENBERG.

SCREW DRIVER.

APPLICATION FILED APR. 18, 1907.

925,115.

Patented June 15, 1909.

Fig. 1.

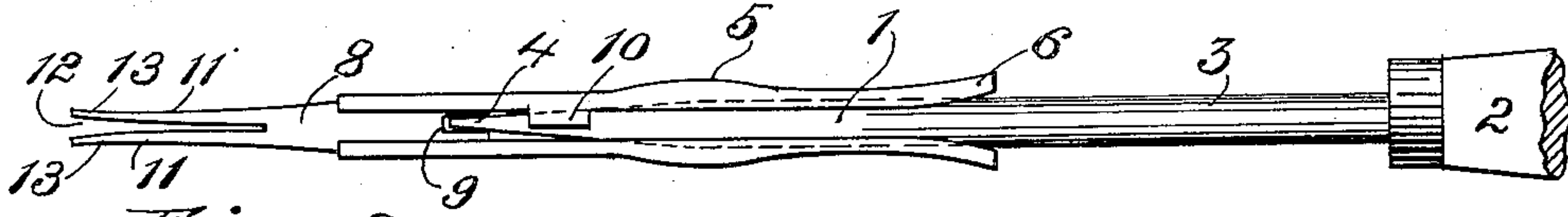


Fig. 2.

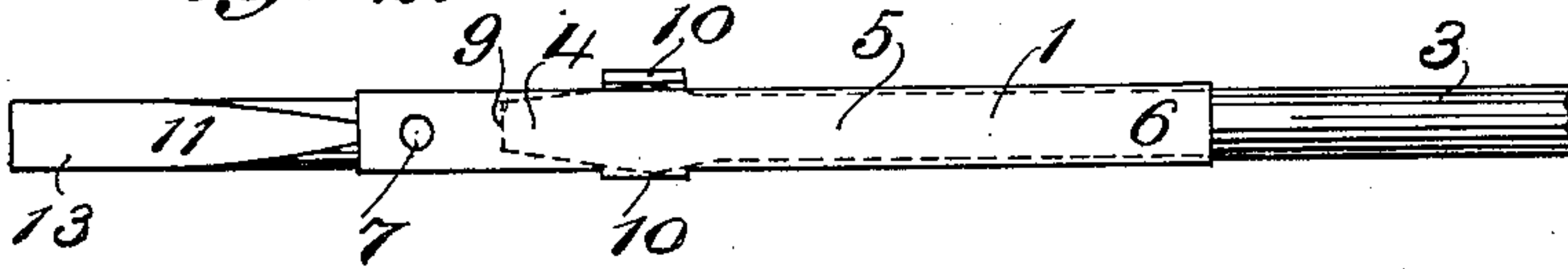


Fig. 3.

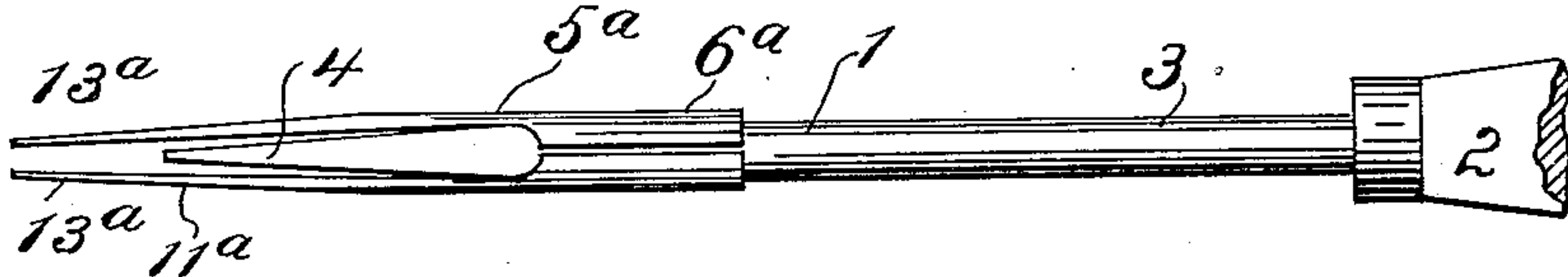
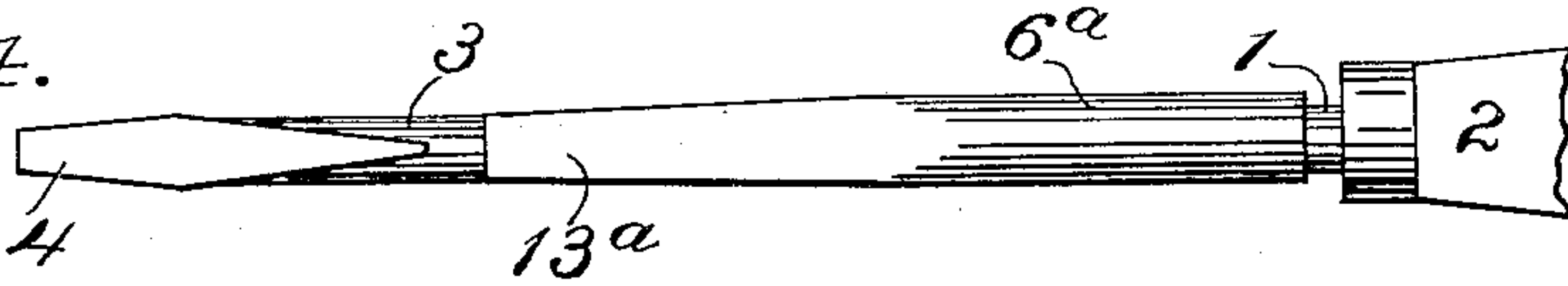


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ALFRED LOEWENBERG, OF INDIANAPOLIS, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO WILLIAM MEYER, OF CHICAGO, ILLINOIS.

SCREW-DRIVER.

No. 925,115.

Specification of Letters Patent.

Patented June 15, 1909.

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To all whom it may concern:

Be it known that I, ALFRED LOEWENBERG, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Screw-Driver Attachments, of which the following is a specification.

It often happens that a screw has to be driven in a locality that can be reached by gimlet and driver but which it is difficult or impossible to reach by the hand, or by thumb and forefinger, in such manner as to hold and steady the screw during the first few twirls, until it has secured a firm bite; then the desirability of an auxiliary device for such purpose becomes apparent. Watch-makers, horologists and opticians, also, have to deal with screws of such minuteness that they likewise feel the necessity for a driver that will initially hold the screw in position to be driven and impart to it the first few of the twirls, or even drive it home. To meet such wants or difficulties I have devised a driving attachment, for use with screws, which is adapted to be detachably carried upon an ordinary driver over the bit and to engage the head-slot or nick of the screw with sufficient frictional force to hold said screw and align it with the bore into which it is to be driven, during the incipient driving operation, and thereafter either to drive it home, as where the bore is constant, in watch and like work, or to be disengaged and replaced by a bit of a regular driver.

In the drawings: Figure 1 is an edge elevation, partly broken away, of an ordinary screw-driver, fitted with a removable attachment for the initial holding, aligning and driving of the screw; Fig. 2, an elevation of said driver, taken from the side, showing the bit of the screw-driver proper in dotted lines, and Figs. 3 and 4, edge and side elevations of an ordinary screw-driver, with an attachment for initial holding and driving telescopically fitted thereon.

Referring now to said drawings, the numeral 1 indicates an ordinary screw-driver composed of handle 2, shank 3 and bit 4, upon which, in Figs. 1 and 2, is fitted a removable attachment 5 for the initial holding and driving of the screw. This attachment is composed of two longitudinally scooped or troughed springs 6 adapted to embrace and firmly clip the shank of the driver. At

their outer ends these springs are secured by rivet 7 to a short cylindrical block 8 of about the diameter of said shank and slotted at 9 to snugly receive the bit of the driver. The springs also have keepers 10 to embrace the edges of the bit, so that when the springs are slipped upon the shank and the point of the latter inserted into the slot 9, the parts will interlock and the attachment become a rigid continuation of the driver proper. The outer end of the block has beveled faces 11 and is slitted at 12 to form bit-like springs 13 which, when compressed together, will form or provide a provisional bit capable of being inserted into the nick or notch of a screw-head, and will then, by expansion, hold the screw by frictional grip until it has been inserted into the hole and sufficiently driven to insure a firm bite. The driver and attachment can then be withdrawn, the attachment slipped off of the driver, and the latter used to force the screw home.

In the construction indicated in Figs. 3 and 4, the attachment 5^a telescopes upon the shank 3 of the driver proper. Instead of being formed with two clamping springs to embrace the shank of the driver, as in the first example, it has a split spring sleeve 6^a which takes over said shank, and from which are continued integrally the flattened holding and driving bit-springs 13^a, which, when pressed together for insertion into the nick of the screw-head, clamp against or engage with the bit of the driver proper, preserve the alinement, enable said bit to whirl the provisional bit, and with it the screw, positively, and by receiving the thrust of said wedge-shaped regular bit, are caused to grip the screw-head with greater force than that due to their resiliency alone. When the screw has been set in position the driver and attachment will be withdrawn and the attachment then pushed back upon the shank, toward the handle of the driver, to expose the bit proper, as in Fig. 4, by which latter the screw will be driven home. This attachment is also removable.

I claim—

1. The combination with an ordinary screw-driver having a permanent unmutated blade, of a provisional driving bit locking therewith to be positively driven thereby, and detachable therefrom, and composed of a spring clamp to clip the spindle of the driver and two bit-springs adapted to be

contracted and inserted into the nick of a screw-head and to lock therein when expanded.

2. The combination with an ordinary screw-driver having a permanent unmuti-
5 lated blade, of a provisional driving bit detachable therefrom, constructed to engage the bit of the driver proper and be positively driven thereby, and having a spring
10 clamp to grip the spindle of the driver and two bit-springs adapted to be engaged with the nick of a screw-head and lock therein.

3. In combination with an ordinary screw-driver having a permanent unmuti-
15 lated blade, a provisional bit attachable to and detachable therefrom, comprising a spring clamp to grip the spindle of the driver, a block nicked to receive the bit of the driver, and two bit-springs projecting forward from
20 said block and adapted, when compressed, to be inserted into the nick of a screw-head and to lock therein when permitted to expand.

4. A provisional bit, attachable to and de-
25 tachable from an ordinary screw-driver having a permanent unmutilated blade, and

comprising a spring clamp to grip the spindle of the driver, and a block to which said clamp is attached, said block being nicked for the reception of the bit of the driver 30 proper, and also being provided with forwardly beveled faces with a slit between to form two bit-springs adapted, when compressed, to be inserted into the nick of a screw-head and to lock therein when per- 35 mitted to expand.

5. A provisional bit comprising two
troughed springs 6, adapted to fit over and clamp the spindle of a regular, ordinarily
constructed screw-driver having unmuti- 40 lated blade, keepers 10 on said springs, and the cylindrical block 8, slotted at 9 to receive the bit of the regular driver, beveled at 11 and slitted at 12 to provide bit-springs
13 adapted, when compressed, to be inserted 45 into the nick of a screw-head and to lock therewith when permitted to expand.

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Witnesses:

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