

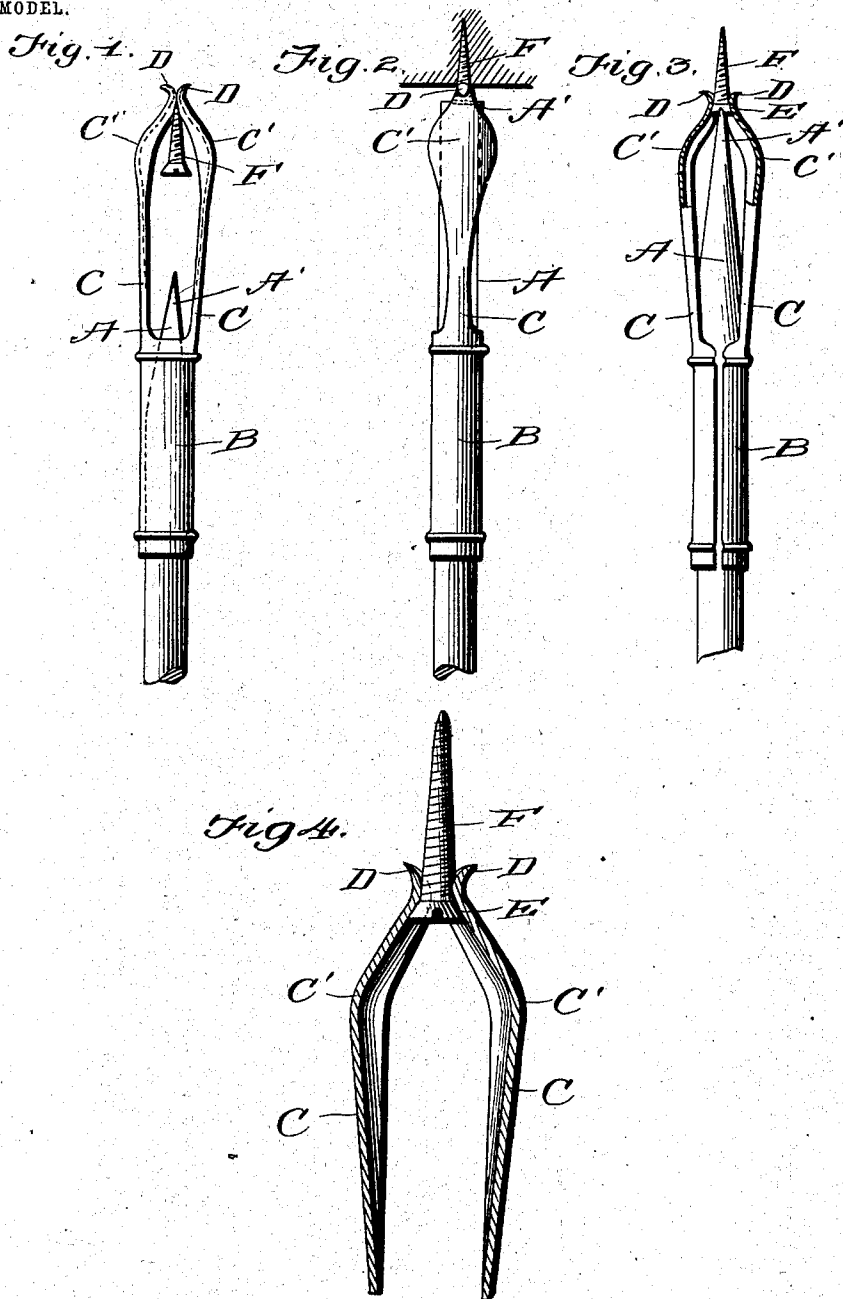
No. 729,830.

PATENTED JUNE 2, 1903.

J. A. YATES.
AUTOMATIC SCREW HOLDING DEVICE.

APPLICATION FILED DEC. 17, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN A. YATES, OF ROCKPORT, INDIANA.

AUTOMATIC SCREW-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 729,830, dated June 2, 1903.

Application filed December 17, 1902; Serial No. 135,623. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. YATES, a citizen of the United States, residing at Rockport, in the county of Spencer and State of Indiana, have invented certain new and useful Improvements in Automatic Screw-Holding Devices; 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in automatic screw-holding devices adapted to be applied to the blade of a screw-driver and designed to hold a screw to be engaged by the screw-driver blade while forcing the same in place; and it consists in the provision of a flexible split shell adapted to telescope over the screw-driver blade and provided with yielding arms which are spoon-shaped and have their free ends outwardly curved, said spoon-shaped portion forming concaved jaws adapted to engage the tapering head of a screw.

The invention consists, further, in various details of construction, which will be hereinafter described and then specifically defined in the appended claim and is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation showing my improved screw-holding device as applied to the blade of a screw-driver. Fig. 2 is a view at right angles to the view shown in Fig. 1 and showing the blade of the screw-driver in engagement with the slot of the screw held by the flexible arms of the device. Fig. 3 is a side elevation, partly in section, taken in a plane at right angles to Fig. 2, showing the screw-driver held in contact with a screw; and Fig. 4 is an enlarged sectional view of the device.

Reference now being had to the details of the drawings by letter, A designates the blade of a screw-driver, having a tapering end A', and B designates the hollow split shell of the screw-holding device, which is yieldingly expansible and adapted to telescope over the blade of the screw-driver and so constructed

as to grip the screw-driver blade sufficiently tight to hold the device in place on any part of the blade that the operator may desire. In the drawings I have shown this shell of cylindrical form, adapted to fit the cylindrical shank portion of a screw-driver blade; but, if desired, this may be of different shapes—for instance, flat, in order to fit blades of such shape. Projecting from one end of said shell are two flexible arms C, which are concaved on their inner faces and outwardly bent at C', while their extreme ends are curved outward, as shown at D. The portion of said arms adjacent to said ends is beveled, as at E, in order to conform to the taper of the head of a screw. At the free ends of said flexible arms, where they come in contact with the curved portions, are formed concaved jaws adapted to engage a screw F and hold the same by frictional contact therewith. The screw is inserted between the jaws through the space between the arms, and the end of the screw-driver blade is pushed forward until it engages the slot in the screw, as shown in Fig. 2. In this position it will be observed that the beveled head of a screw is in contact with the concaved walls of the jaws and the apparatus is in position to operate in the act of forcing the screw into any material. If desired to use the screw-driver independent of the device, the latter may be pushed up longitudinally from the end of the blade of the screw-driver, the device holding itself in place by means of the shank portion, as before described, and the screw-driver then used in the usual manner. The shell, which is yieldingly expansible and of different shapes, may be held to cylindrical or flat blades.

While I have shown a particular construction of device embodying my invention, it will be understood that I may make alterations in the detailed construction of the same without departing from the spirit of the invention.

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

A screw-holding device comprising a yieldingly-expansible split shell adapted to be held over the shank portion of a screw-driver, integral yielding arms projecting from one end

of the shell at positions diametrically opposite, said arms being contracted adjacent to their free ends and having spoon-shaped portions which merge into oppositely and outwardly curved ends forming concaved jaws adapted to receive and hold a screw, as set forth.

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

JOHN A. YATES.

Witnesses:

ALICE B. YATES,
T. J. REINHARD.