W. A. PECK.

TOOL HOLDER.

APPLICATION FILED AUG. 6, 1909.

939,079. Patented Nov. 2, 1909.

Fig. 1.

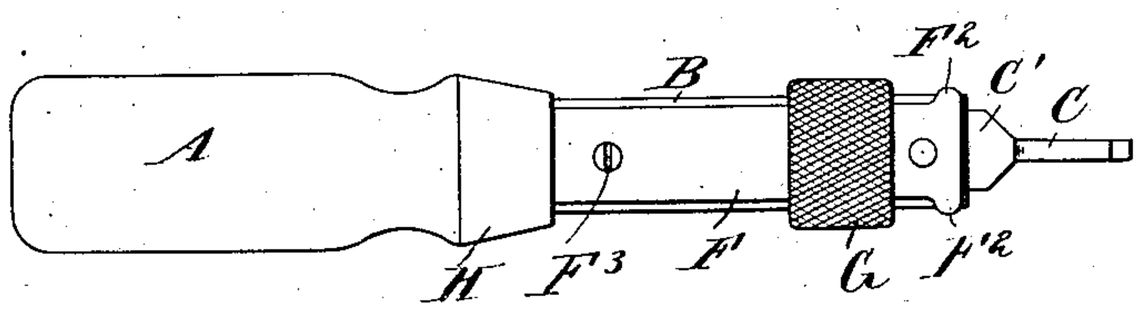


Fig. 3.

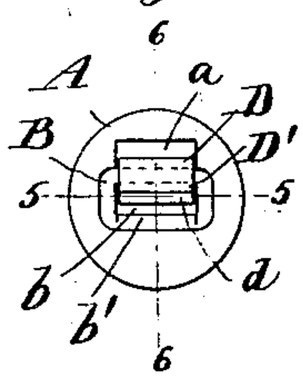


Fig. 2.

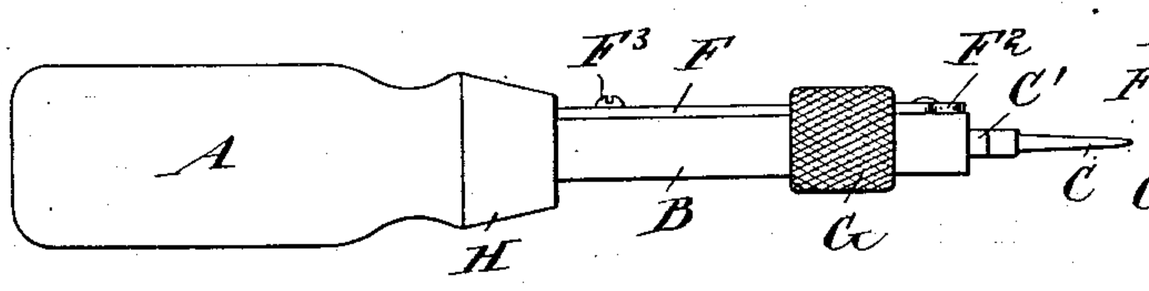


Fig. 4.

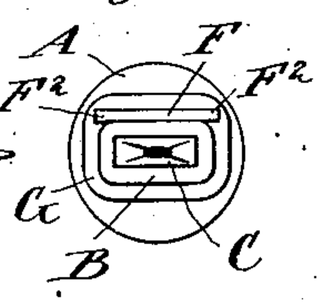


Fig. 5.

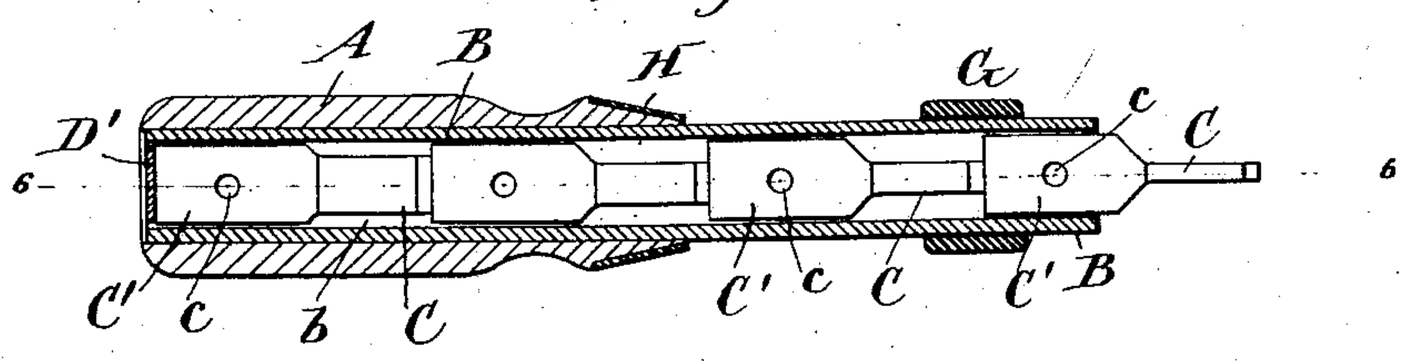


Fig. 6.

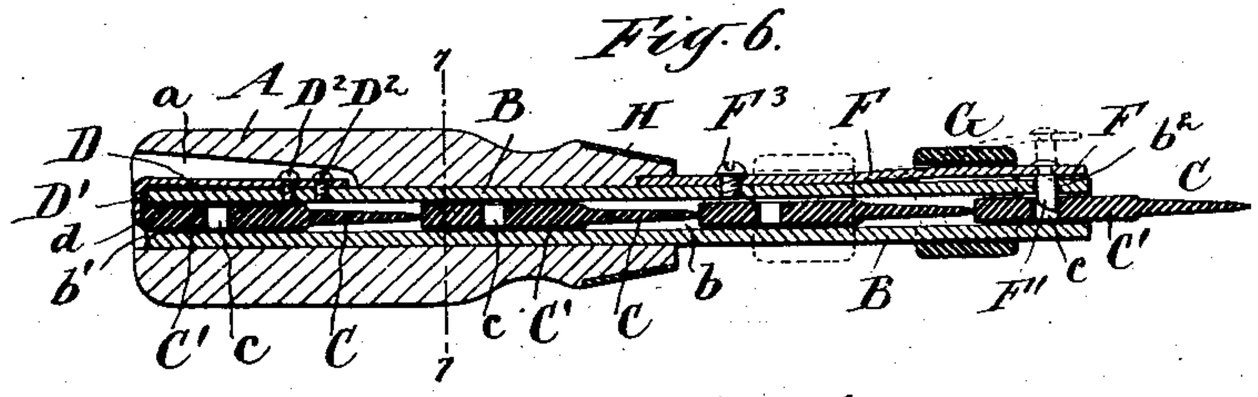
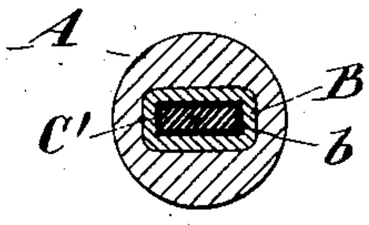


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM A. PECK, OF JERSEY CITY, NEW JERSEY.

TOOL-HOLDER.

939,079. Specification of Letters Patent. Patented Nov. 2, 1909.

Application filed August 6, 1909. Serial No. 511,589.

To all whom it may concern:

Be it known that I, WILLIAM A. PECK, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Tool-Holders, of which the following is a specification.

The invention relates to holders for containing a plurality of small tools, as screwdriver bits, awls and the like, and presenting the desired tool or bit for service, and the object of the invention is to provide a compact, easily operated holder or magazine in which a number of tools are contained, with means for presenting either of the tools, reliably held for use, and for permitting a quick interchange of such tools from the magazine to the position for service.

The invention consists in certain novel features of arrangement and details of construction by which the above objects are attained, to be hereinafter described.

The accompanying drawings form a part of this specification and show an approved form of the invention as applied to a plurality of screwdriver bits.

Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is an elevation of the rear end. Fig. 4 is an elevation of the front end. Fig. 5 is a longitudinal central section partly in plan view, the plane of section being the line 5—5 in Fig. 3. Fig. 6 is a corresponding axial section, at a right angle to the preceding figure, taken on the line 6—6 in Figs. 3 and 5. Fig. 7 is a cross section on the line 7—7 in Fig. 6.

Similar letters of reference indicate the same parts in all the figures.

A is the handle which may be of general cylindrical form adapted to serve with a screwdriver blade or bit, having a flattened tube B of metal fitted axially therein and projecting at the front. The hollow interior of the tube is of rectangular cross-section and serves as a channel *b* for the reception of a series of screwdriver bits C inserted end-to-end therein with their body portions C^1 of uniform size and matching thereto. The tube B is of such length, and the bits so proportioned relatively thereto, that when the channel is filled with the bits in contact each with the next, one bit extends beyond the tube at the front end in position for service. The torsional strains to which such bit is subjected are received and resisted by the rectangular tube. At the rear end of the tube B, on one of its flat exterior faces, is mounted a flat spring D secured to the tube by screws or rivets D^2 D^2 and having its free end bent at an approximately right angle to form a flange or lip D^1 partially covering the rear opening of the tube, serving as the entrance to the channel; the edge of the lip is beveled or chamfered as at *d* and the opposite edge of the tube is also rounded as at b^1 to permit the bits to be introduced one after the other into the channel by forcibly raising the lip D^1 in the act of entering the bit, the interior of the handle being recessed at *a* to permit the spring to rise correspondingly. Thus constructed the end thrust on the exposed bit when in use is transferred through the succeeding bits and is received on the lip D^1 which with its spring D is strong enough to resist such strain.

As shown, the points of the bits are of different widths as may be required for different sizes of screws or other conditions; to protrude any desired bit contained in the magazine or channel, the exposed bit is withdrawn from the front end and entered point first at the rear, and pressing against the rearmost bit moves the entire series forward in the channel, causing the second bit to be protruded at the front, this operation is repeated until the desired bit is presented.

In order to prevent the escape of the bits at the front end when the holder is reversed, means are provided for engaging the body of the exposed bit and holding it in place. Any suitable gripping device may be employed but the means shown is preferred for the reason that it also aids in resisting the end thrust to which the exposed bit is subjected. It consists of a leaf or flat spring F attached to the exterior of the tube B at the front and having a dog F^1 on its under face extending through a hole b^2 in the wall of the tube into the channel and engaged in a hole or recess *c* in the body portion C^1 of the bit. The set of the spring F tends to lift the dog out of engagement and it is held in such engagement by a slide or collar G encircling the front end of the tube and inclosing the spring, which when forced forward depresses the dog into engagement and when retracted permits the spring to rise and release the bit in making the interchange from one size to another.

Each bit is provided with a recess *c* prop-

erly located to receive the dog, and the latter is beveled at the rear to facilitate the passage of the bits thereunder. The front face of the dog when engaged with a bit receives the rearward end thrust of the latter and thus aids in resisting such strains. If preferred the whole end thrust may be thus received and the spring D correspondingly lightened to provide merely sufficient force to prevent the rearward escape of the bits.

On the front of the spring F are ears F^2 F^2 projecting laterally to prevent the collar or slide G passing over the end of the tube. The rear end of the spring F is received in a recess in the handle and is thus held and reinforced in addition to the fastening screw or rivet F^3. H is a ferrule serving as a finish for and to strengthen the front end of the handle.

The bits are preferably of uniform length with the recesses *c* uniformly located so that each will be properly presented for engagement with the dog F^1 irrespective of the order in which they are introduced to the magazine.

The whole forms a small compact tool, easily carried in the pocket and having sufficient strength and range for general service.

Although the tool is above described as adapted for screwdriver bits it will be understood that awls, boring bits, or other articles may be substituted.

The cross-sectional form of the channel may be varied as may the sizes and proportions of the parts, and the number of bits.

I claim:—

1. In a magazine tool-holder, a tube, a plurality of bits matching thereto and lying end-to-end therein in series, the bit at one end projecting beyond said tube, and means for holding said bits in said tube and resisting end thrust and torsional strains thereon.

2. In a magazine tool-holder, a tube forming a continuous channel of angular cross-section, a plurality of bits of corresponding section matching said channel and lying end-to-end therein in series, and a yielding closure at one end of said tube, arranged to permit the introduction of said bits successively.

3. In a magazine tool-holder, a tube forming a continuous channel of angular cross-section, a plurality of bits of corresponding cross-section matching said channel and lying end-to-end therein in series, with the bit at one end projecting beyond said tube, means at said end for holding such projecting bit against endwise movement, and a yielding closure at the opposite end of said tube, arranged to permit the introduction of said bits successively and to resist thrusting strains thereon.

4. The magazine tool-holder described, comprising a tube of rectangular cross-section forming a continuous channel, a series of bits matching such channel and lying in end-to-end contact therein with the bit at one end projecting beyond said tube, means at said end for holding such projecting bit against forward movement, a spring secured to said tube at the opposite end and having a lip serving as a yielding closure for such opposite end and receiving rearwardly directed thrusting strains delivered thereto through said series.

5. The magazine tool-holder described, comprising a tube of rectangular cross-section forming a continuous channel, a series of bits matching such channel and lying end-to-end therein with the bit at one end projecting beyond said tube, and each having a recess, yielding means at such end arranged to engage the said recess in said projecting bit, and means at the opposite end of said tube constructed to permit the introduction of said bits successively and to resist strains delivered thereto through said series.

6. The magazine tool-holder described, comprising a tube of rectangular cross-section forming a continuous channel, a series of bits matching such channel and lying end-to-end therein with the bit at the front end projecting beyond said tube, and each having a recess, a spring attached to said tube at such front end, a dog on said spring arranged to engage the recess in said projecting bit and resist thrusting strains thereon, means for releasing said projecting bit from engagement with said dog, and means at the rear end of said tube for yieldingly closing said channel.

7. The magazine tool-holder described, comprising a tube of rectangular cross-section forming a continuous channel, a series of bits matching such channel and lying in end-to-end contact therein with the bit at the front end projecting beyond said tube, and each having a recess, a spring attached to said tube at such front end, a dog on said spring arranged to engage the recess in said projecting bit, a slidable collar inclosing said tube and spring for holding said dog in engagement, a spring secured to said tube at the rear end and having a lip serving as a yielding closure for the rear end of said channel, said springs constructed to resist rearwardly directed thrusting strains on said projecting bit.

In testimony that I claim the invention above set forth I affix my signature, in presence of two witnesses.

WILLIAM A. PECK.

Witnesses:
THOMAS DURANT,
E. H. BOND.