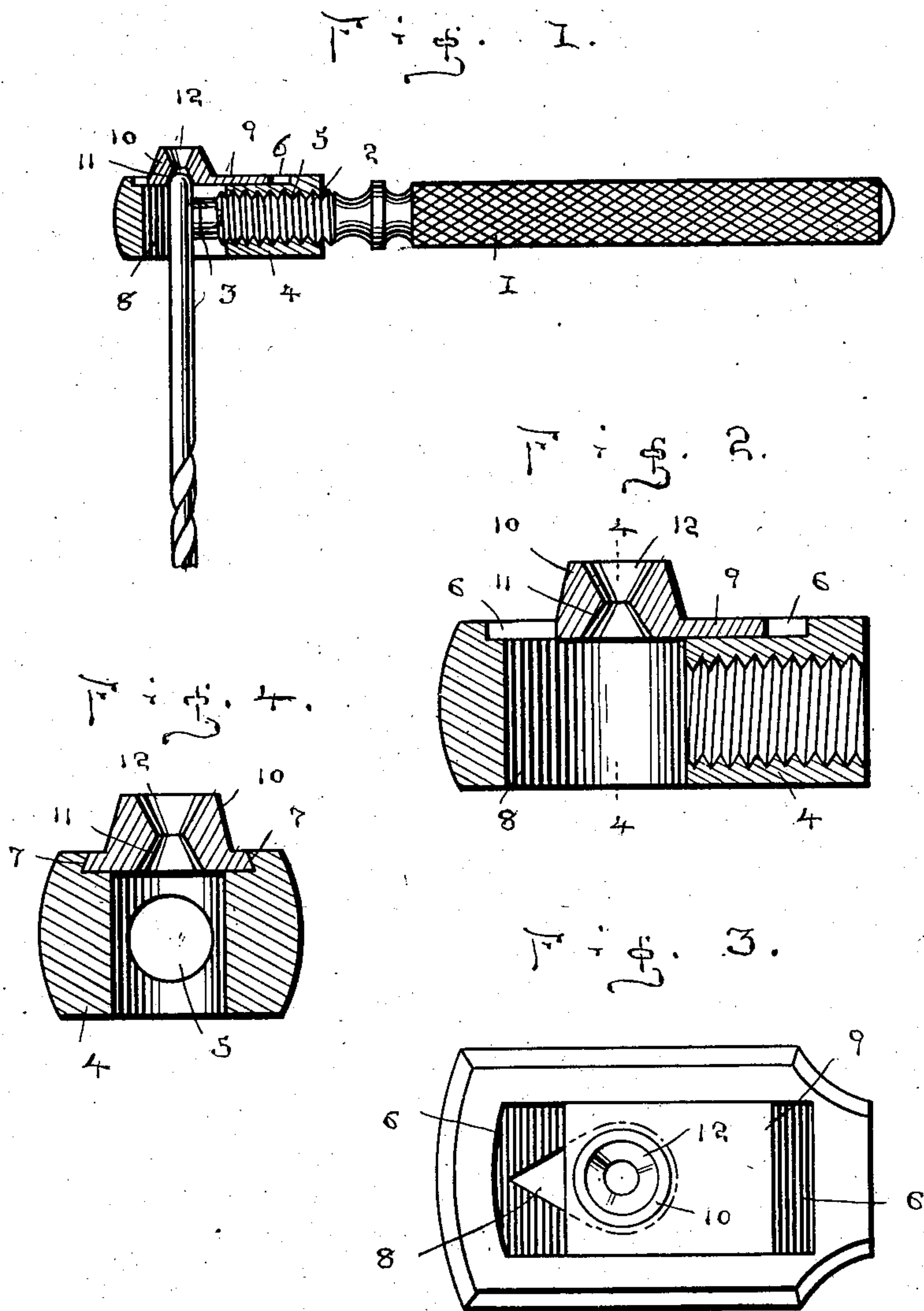


No. 729,322.

PATENTED MAY 26, 1903.

P. GAGNON.
CENTERING AND HOLDING TOOL.
APPLICATION FILED AUG. 29, 1902.

NO MODEL.



Witnesses
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PETER GAGNON, OF FLORENCE, MASSACHUSETTS.

CENTERING AND HOLDING TOOL.

SPECIFICATION forming part of Letters Patent No. 729,322, dated May 26, 1903.

Application filed August 29, 1902. Serial No. 121,503. (No model.)

To all whom it may concern:

Be it known that I, PETER GAGNON, a citizen of the United States, residing at Florence, in the county of Hampshire and State of Massachusetts, have invented new and useful Improvements in Centering and Holding Tools, of which the following is a specification.

This invention relates to a centering and holding tool for centering and holding small drills, reamers, and the like in a lathe; and the primary object of the same is to provide a simple and effective device of this class having means whereby a drill or other device may be reliably centered and firmly held for use in a lathe and comprising an organization of elements which are capable of quick adjustment for ready application to a lathe-center.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a sectional elevation of a tool embodying the features of the invention and showing the drill held therein. Fig. 2 is an enlarged longitudinal vertical section of a clamping-head forming a part of the improved tool. Fig. 3 is a top plan view of the clamping-head. Fig. 4 is a transverse vertical section on the line 4 4, Fig. 2.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a handle of any suitable length, which has a roughened or milled surface and a screw-threaded stem 2 at one end terminating in a swiveled head 3 of suitable form. Coöperating with the said handle is a clamping-head 4, having a screw-threaded bore 5 to receive the said stem and also formed with a side slot 6, having dovetail walls 7. Extending through the clamping-head 4 and communicating with the slot 6 is an opening 8, of substantially triangular form, as clearly shown by Fig. 3, the walls of the said opening 8 converging toward the free end of the clamping-head. In the slot 6 and engaging the dovetail wall 7 thereof is a cen-

tering-slide 9, having a terminal enlargement 10 with opposite countersinks 11 and 12.

The shank of the drill, reamer, tap, or other device is inserted in the substantially triangular opening 8, the handle 1 having been first turned to draw the screw-stem 2 and its swivel-head 3 outwardly from the clamping-head. When the tool is placed in the clamping-head, the end thereof is caused to engage the countersink 11 in the terminal enlargement 10 of the slide 9, and the tool and slide are then pushed toward the free end of the clamping-head and secured by turning the handle in the proper direction to bring the swivel-head against the tool-shank. It will be seen that the opposite walls of the triangular opening 8 firmly engage the shank of the tool held within the head 4, and after the swivel-head 3 has been caused to firmly bear against the portion of the tool-shank within the head the tool, together with the slide, will be firmly held against movement, and the holder, with the tool, can then be readily applied to a lathe-center which engages the countersink 12. It will also be seen that the triangular-shaped opening 8 accommodates tool-shanks having different dimensions or diameters, and by the use of the improved holder the tool is centered with trueness in relation to the lathe-center.

It is proposed to construct the several parts of such material as will withstand wear and tear and also to vary the proportions, dimensions, and form of the several parts as well as the minor details without departing from the principle of the invention.

Having thus described the invention, what is claimed as new is—

1. In a holding and centering device of the class set forth, the combination of a head having an opening therethrough and a slot, a slide mounted in the slot and having a terminal enlargement with countersinks; and a handle having a screw-threaded stem adjustably mounted in the head and provided with a swivel-head which extends into the said opening.

2. A centering and holding tool of the class

set forth comprising a clamping-head with an opening therethrough of substantially triangular form and a slot in one side thereof having dovetail walls, a slide mounted in the said slot and having a terminal enlargement with coinciding countersinks therein, the said slide being movable in close relation to one side of the head, and a handle having a screw-stem

with a terminal adapted to extend into the said opening.

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

PETER GAGNON.

Witnesses:

WM. S. ELLIOTT,

WM. F. WALSH.