

C. P. GROUT.
Dentists' Tools.

No. 138,150.

Patented April 22, 1873.

Fig. 1.



Fig. 2.

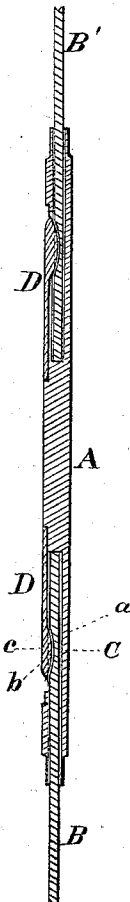
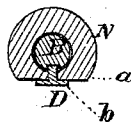


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE

CHARLES P. GROUT, OF NEW YORK, N. Y.

IMPROVEMENT IN DENTISTS' TOOLS.

Specification forming part of Letters Patent No. **138,150**, dated April 22, 1873; application filed January 30, 1873.

To all whom it may concern:

Be it known that I, Dr. CHARLES P. GROUT, of the city, county, and State of New York, have invented Improvements in Dentists' Tools, of which the following is a specification:

The object of this invention is to produce simple and efficient means for readily attaching dentists' tools to their handles, and detaching the same for replacement by others with equal convenience. My invention consists in providing the shank of each tool with a groove or recess, and in forming on the handle a socket for receiving the grooved or recessed portion of the tool-shank, and a spring for catching into the groove of the shank and locking the same in the handle. The end of the groove, or the end of the projection on the spring which catches into such groove, is beveled to permit the automatic locking and unlocking of the spring during the attachment and removal of the tools to or from the handle.

In the accompanying drawing, Figure 1 represents a side view of a tool-handle made of my improved construction. Fig. 2 is a longitudinal central section of the same, showing the manner of locking the tool-shank; and Fig. 3 is a transverse section, on an enlarged scale, taken on the line C C, Fig. 2.

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

The letter A represents the tool-handle, provided with a socket at its end for receiving the shank B of the tool. This shank is of cylindrical form, and is, near its upper end, provided with a groove or recess, *a*, of V-shaped, semicircular, or rectangular cross-section. D is a spring-plate, fastened to the outer side of the handle A, and provided with a projection, *b*, on its inner face, which passes through a slot in said handle into the groove *a* of the shank, as is clearly shown in Fig. 2. The end

or ends of the groove *a* may be rounded off or beveled; or else the end or ends of the projection *b* may be rounded or beveled, or both the groove and projection may be rounded and beveled, as shown, to permit the ready detachment of the tool-shank from the handle by mere rectilinear motion, and also the ready application of the said shank to said handle.

When the shank is to be introduced into the socket of the handle it is merely inserted therein, and then turned until the spring projection *b* snaps into the recess or groove *a*, and is then and thereby locked sufficiently firm for use.

For detaching the shank from the handle, it is only necessary to pull it out of the same, the spring yielding to such rectilinear motion on account of the bevel or bevels above referred to.

The handle A may be made double, as shown, to receive a tool at each end, or to constitute a coupling between a tool and a means of turning or hammering the same, for which purpose suitable machinery may be employed, and in which case the upper shank B' will be part of such machinery, but similarly constructed to the shank B of the tool.

I do not herein desire to lay claim to any part of the invention described in the patent of C. H. Dubs, of October 17, 1848, No. 5,865.

Claim.

The tubular slotted handle A, combined with the spring D, which is rigidly fastened to it, and which is provided with the projection *b* for locking the notched tool-shank B, and for allowing the release of said shank by a simple pull, substantially as specified.

CHAS. P. GROUT.

Witnesses:

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