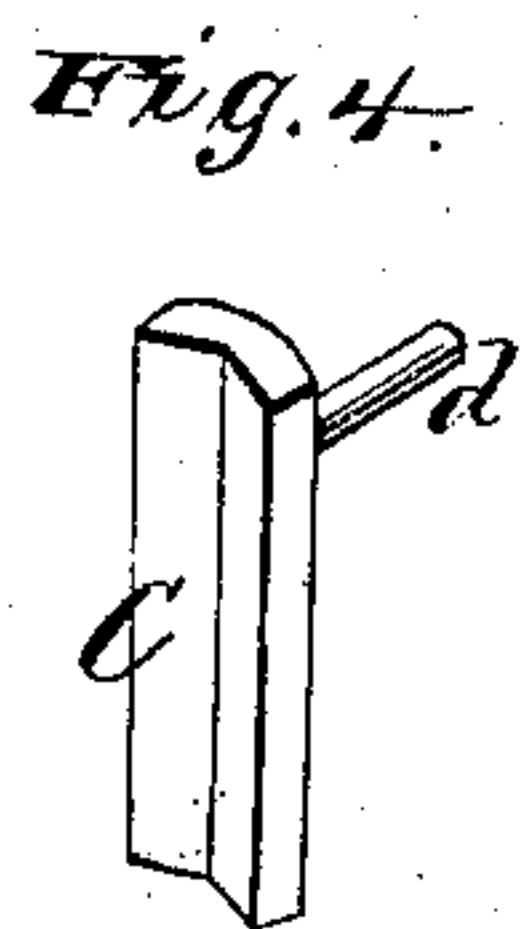
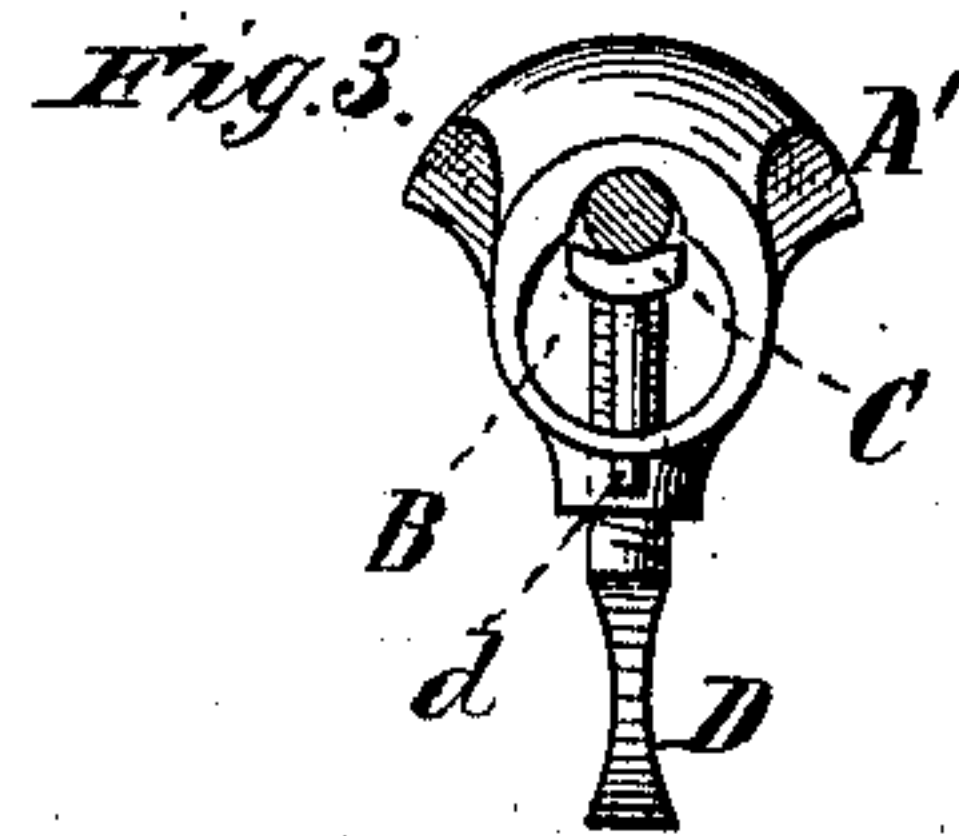
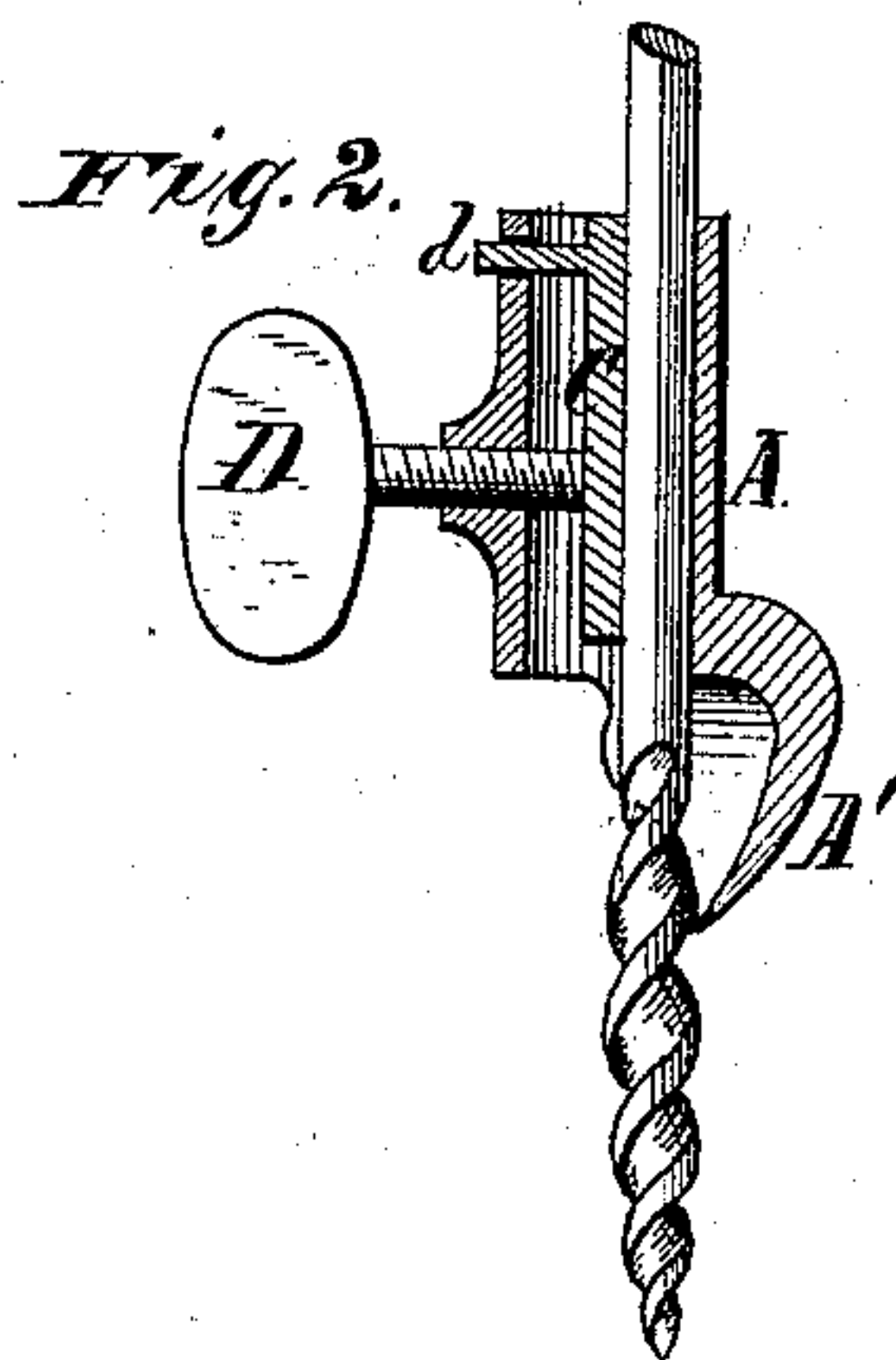
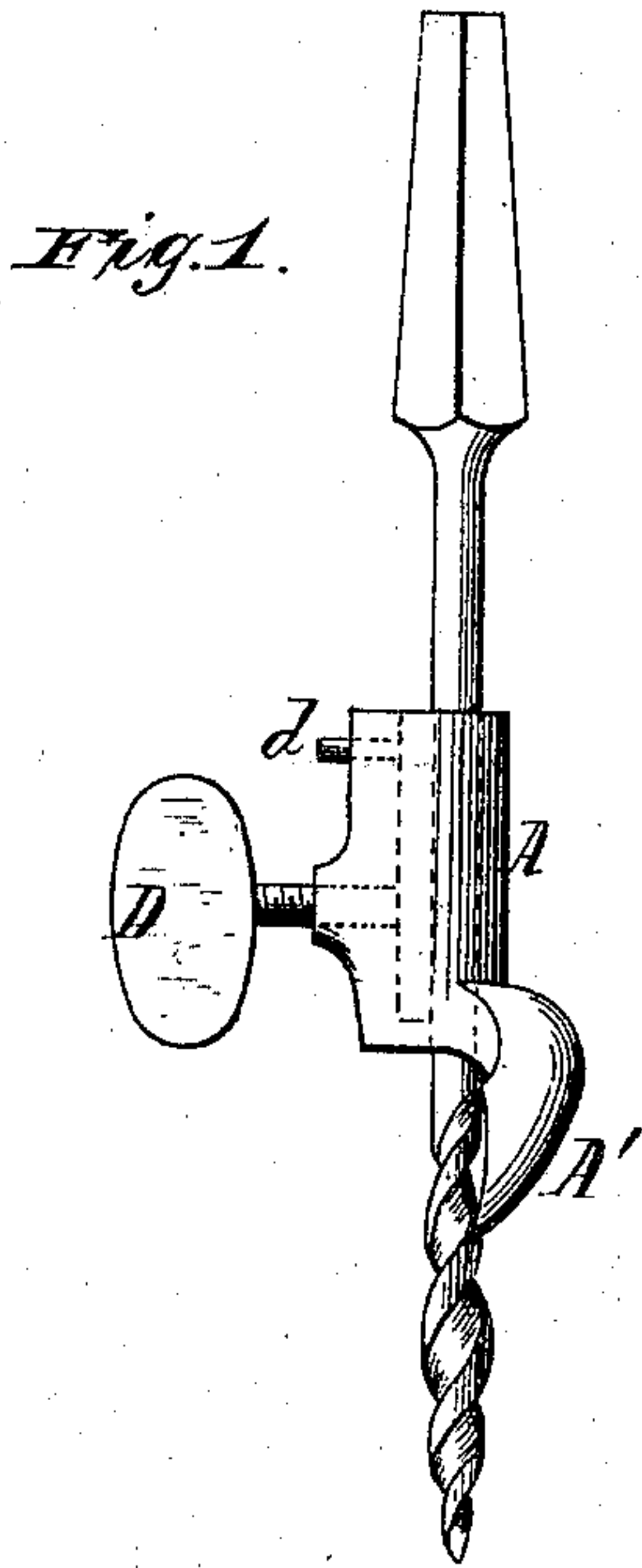


W. R. GILL.  
Countersink.

No. 209,252.

Patented Oct. 22, 1878.



WITNESSES  
*Alexander Mahon*  
*John B. Center*

By

INVENTOR  
*William R. Gill*  
by *A. M. Smith*  
Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM R. GILL, OF MEADVILLE, PENNSYLVANIA.

## IMPROVEMENT IN COUNTERSINKS.

Specification forming part of Letters Patent No. **209,252**, dated October 22, 1878; application filed April 23, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM R. GILL, of Meadville, county of Crawford, State of Pennsylvania, have invented certain new and useful Improvements in Countersinks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of a bit, showing the countersink applied. Fig. 2 is a section through the countersink, showing the bit in position. Fig. 3 is a top view of the countersink with the bit in section, and Fig. 4 is a perspective view of the device for clamping the bit in the countersink.

Similar letters of reference denote corresponding parts in all figures.

My invention relates to that class of countersinks which are adapted to be applied to the ordinary gimlet-bit in common use when it is desired to form the countersink for the head of a screw; and it consists in a novel manner of connecting the countersink to the bit, all as hereinafter described.

In the accompanying drawings, A represents the shank or body of the countersink, which is cylindrical in form, and is provided with an opening, B, extending through it, and which should be of sufficient size to receive the largest of the ordinary gimlet-bits in common use.

The lower end of the shank or body is provided with the countersink-cutter A', which may be of any preferred form or construction.

C is a clamping-block, by means of which the bit is secured in place. This block is mounted in the hollow shank or cylindrical portion of the countersink, and held in place therein by means of a guide-pin, d.

The clamping-block C is of about the same length as the shank, and conforms in shape on its outer face to the inner face of said cyl-

inder. The inner face is provided with an obtuse-angled face, adapting it to rest or bite on the shank of the bit at two points or upon two sides, for giving it the required hold or grasp thereon.

D is a thumb-screw, which has its bearing in the shank or body A near the lower end, or at the opposite end to the guide-pin d, which holds the clamping-block C in place, and by means of which screw the clamping-block is moved up to and made to grasp the bit.

By the construction above described it will be seen that the countersink is adapted to be secured to any of the various sizes of gimlet-bit in use, and can also be placed at any point on the bit. By this construction, also, the countersink is held firmly in proper working relation to the bit, obviating the liability to displacement consequent upon the employment of the usual method of fastening the countersink thereto.

I am aware that a divided countersink mounted in a strap or holder, to which one part was attached, the other part being adapted to be moved in said strap by means of a set-screw to clamp the bit between them, is not new, such construction being shown in the patent granted to W. B. Erskine, July 11, 1876, and I hereby disclaim such construction; but,

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

The block C, supported in the tubular shank by means of the guide-pin d, and provided with the angular clamping-face, as described, in combination with the screw D, for adjusting said block and clamping the countersink to the bit, as described.

WILLIAM R. GILL.

Witnesses:

GEORGE W. ADAMS,  
J. D. GILL.