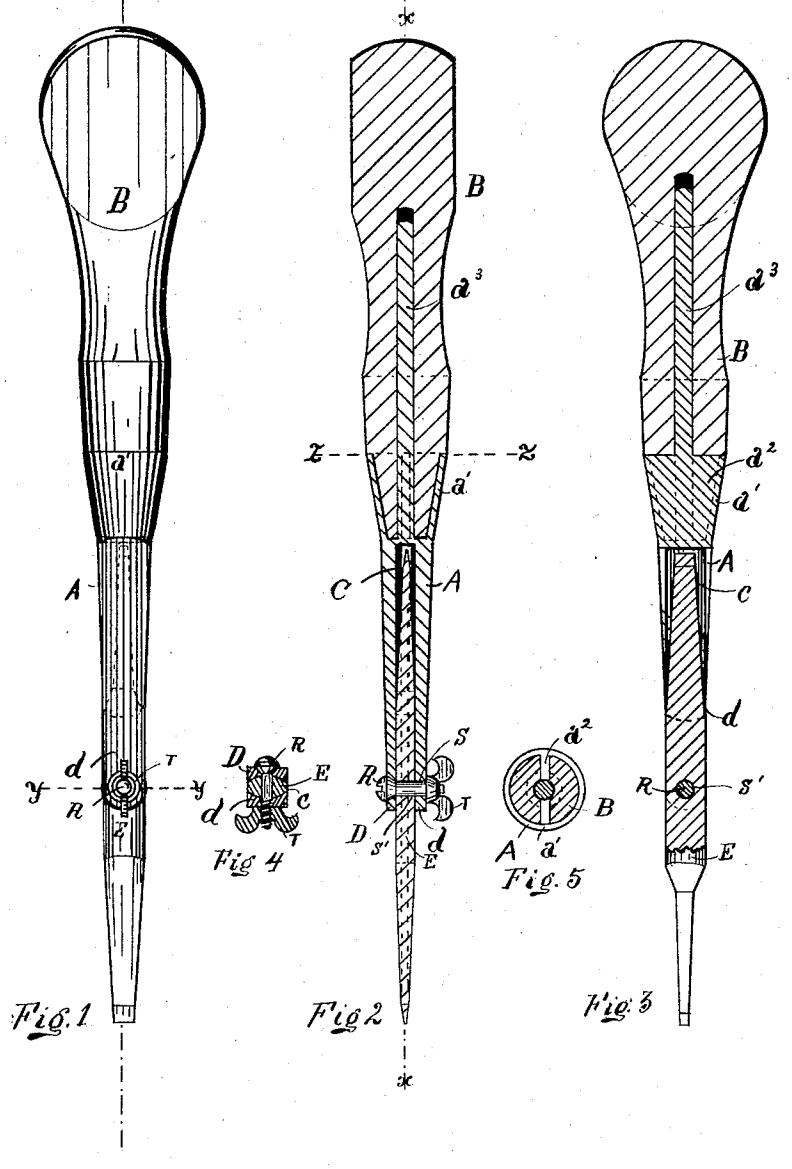
(No Model.)

W. CRONK.

COMBINED SCREW DRIVER AND BRAD AWL.

No. 366,205. Patented July 12, 1887.



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COMBINED SCREW-DRIVER AND BRAD-AWL.

SPECIFICATION forming part of Letters Patent No. 366,205, dated July 12, 1887.

Application filed January 31, 1887. Serial No. 225,961. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CRONK, a citizen of the United States, and a resident of Havana, in the county of Schuyler and State of New York, have invented certain new and useful Improvements in a Combined Screw-Driver and Brad-Awl, of which the following is a specification.

My invention relates to improvements in a combined screw-driver and brad-awl; and it consists in the novel construction and combination of its parts, as hereinafter fully described, and pointed out in the claims.

The object of my invention is to provide means whereby a reversible blade formed in a brad-awl at one end of the blade and a screw-driver at the other end can be quickly and readily adjusted to adapt the same to operate to pierce holes or to turn screws, and to provide an improved tool that shall be meritorious in construction and effective for the purpose designed. I attain these objects by the combination of elements as illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a completed screw-driver and brad-awl as combined in my invention with the driver end of the blade presented. Fig. 2 is a longitudinal central section of same. Fig. 3 is a longitudinal section on the line *x x*, Fig. 2, with the brad-awl end of the blade presented. Fig. 4 is a cross-section on the line *y y*, Fig. 1, and Fig. 5 on the line *z z*, Fig. 2.

Like letters of reference refer to like parts throughout the several views.

A represents the shank of my improved screw-driver and brad-awl combined, having its one end, to which the handle B is made fast in the manner hereinafter described, expanded around about of increasing diameter in a sheet or flange, *a'*, converging conically to a point below in the longitudinal axis of the shank. Above this point, and where said flange in its convergence intersects the body of the shank, I have squared the shank transversely, all but a thin web or partition, a^2, which diametrically connects the flange *a'* as it arises with a farther-projecting central stem, a^3, from the squared shank sufficient to sustain a handle, B, that may have its upper portion flattened or otherwise made, but provided with an end corresponding to the centrally-divided cavity within the projecting flange *a'*, and an opening up its center to receive, by driving the handle down upon it, the web a^2 and stem a^3 of the shank. That portion of the shank opposite from the handle end is provided with a convex-sided slot, C, running longitudinally from the lower free end of the shank up to or near where the flange *a'* begins. The arms D *d* thus made by the slotting of the shank will have inner concaved faces, and in a transverse line hole *s* through them, near their free ends, through which to receive a cross-binding pin or screw-bolt, R, having a nut, T, by means of which the arms may be drawn together, a blade, E, lanceolated and beveled to form a brad-awl—such as ordinarily used by joiners—at one end and a screw-driver at the other end, having its central portion connecting the driver and awl made with convex sides corresponding to the slot C of the shank in cross-section, and a hole, *s'*, through it, by which it is pivoted within the slot upon the cross-binding screw-bolt R. Thus it will be seen that the blade may be revolved about to present either end outward in alignment with the handle for work, and held firmly in this position, in which the opposite end will be within the slot of the shank, by the binding-screw acting in conjunction with the inner faces of the shank-arms D *d*.

I am aware screw-drivers have been made heretofore characteristic of having a borer in combination and a blade supported by yielding binding-arms. Such invention I do not claim, broadly; but

What I do claim, and wish to secure by Letters Patent, is—

1. A screw-driver and brad-awl consisting of the shank A, having a socket having a divisional partition, a^2, and centrally-projecting stem, a^3, the handle B, having a slot across its attaching end and an opening up its center to receive the partition and stem a^3 of the shank, arms D *d*, having concave inner faces, and a reversible blade elliptical in cross-section pivoted within the arms of the shank, substantially as described.

2. A combined screw-driver and brad-awl comprising a shank having a socket divided by partition a^2, and centrally-projecting stem a^3, arms D *d*, divided by slot *c*, having convex sides, handle B, and a blade adapted to be re-

tained in alignment with the handle by corresponding in cross-section to the elliptical slot between the inner faces of the arms, substantially as described.

3. In a combined screw-driver and brad-awl, the shank A, having a socket having a divisional partition or web, a^2, and central stem, a^3, and arms D d, divided by slot c, having convex sides, in combination with a reversible blade corresponding to the slot and having a screw-driver at one end and a brad-awl at the other end, and a pivot-pin provided with means to clamp the blade in the slot within the concaved inner faces of the shank-arms, substantially as described.

WILLIAM CRONK.

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