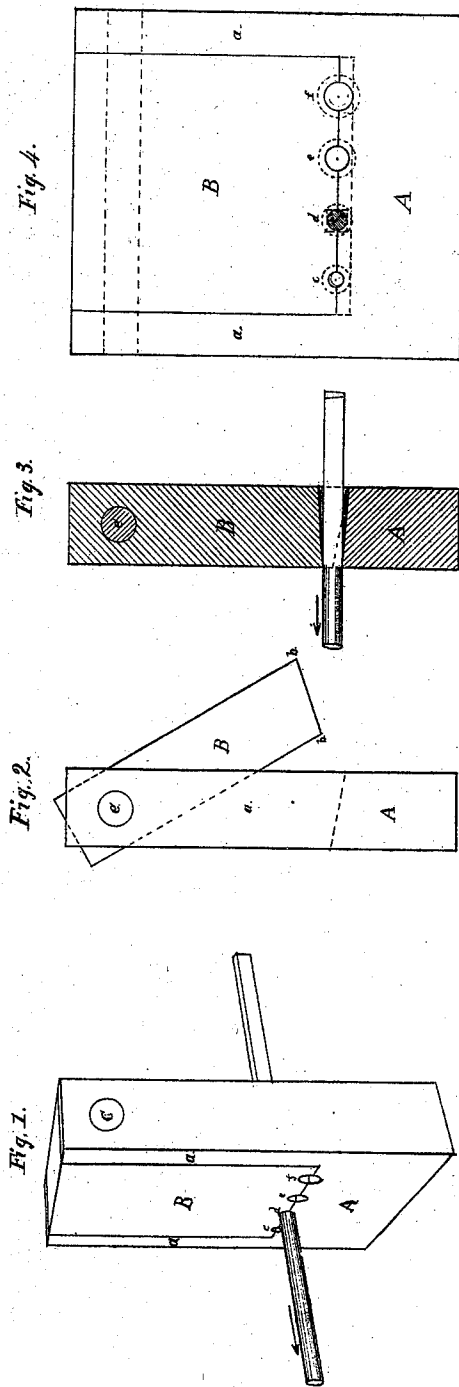


R. Kent,
Manf. Wre.
No. 89,869 *Patented May 11, 1869.*



Witnesses { *Andrew Dow*
William Troop

Robert Kent
 Inventor

United States Patent Office.

ROBERT KENT, OF BROOKLYN, NEW YORK, ASSIGNOR TO THAD. DEUS FOWLER, OF SEYMOUR, CONNECTICUT.

Letters Patent No. 89,869, dated May 11, 1869.

IMPROVED DIE FOR DRAWING AND REDUCING WIRE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ROBERT KENT, No. 150 Sands street, in the city of Brooklyn, in the county of Kings, and State of New York, have invented certain new and useful Improvements in Dies for Reducing Wire; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view;

Figure 2 is an end view;

Figure 3 is a transverse sectional elevation; and

Figure 4 a side elevation.

Like letters indicate like parts in the several figures.

This die is made of chilled iron, or hardened steel.

A is the lower part of said die, its two sides, *a a*, extending upward from either end, as shown in figs. 1, 2, and 4.

B is the upper, or middle part, fitted exactly into A, and jointed, or hinged, by a pin, C, to the upper part of the arms of A, as shown.

B, in fig. 2, is shown opened out.

Its lower face, or edge, *b b*, is bevelled, to allow it to swing open on one side.

Said bevelled face, or edge fits exactly against a complementary face on A.

The openings, or dies, *c d e f*, through which the wire is drawn, are formed on this bevelled joint, but the axes of said openings, instead of following the joint, are at right angles to the sides of die, as shown in transverse section, fig. 3.

Said openings are also tapered, being wider on that side toward which B opens.

The centres of the small ends of taper-holes, or dies

are on the line of joint on that side toward which B closes, as shown in fig. 4. Consequently the centres of large ends of taper-holes or dies are above the line of joint on the other side, the taper of hole and bevel of joint being adjusted to each other, so as not to prevent B closing over the wire.

This die may be made of any required size.

To operate this, the lower part A may be held in a vise, or any other suitable arrangement for that purpose, with the small ends of dies, or taper-holes toward the operator.

B is then opened out to position shown in fig. 2, the end of wire to be reduced is entered the required length, laid in its proper die, or lower half of taper-hole in A. B is pushed into its proper place over the wire, as shown in figs. 1, 3, and 4, and the wire is now drawn through, in the direction indicated by the arrows in figs. 1 and 3, and thus the wire is reduced on the end, that it may enter the solid die in draw-bench, through which it is subsequently drawn, and formed into finished wire. Or, this improved die may be placed in the draw-bench, in place of the usual solid die, when it is required to reduce the wire only, and reduce the whole length of wire coils, and, in this case, the ends of wire would not require reducing, as in the solid die.

What I claim as my invention, and desire to secure by Letters Patent, is—

The herein-described apparatus for reducing wire, when constructed and operating substantially as set forth.

ROBERT KENT.

Witnesses:

ANDREW DOW,
WILLIAM TROAP.