J. W. CAMERON.

WIRE DRAW PLATES.

No. 190,195. Patented May 1, 1877.

Fig. 1.

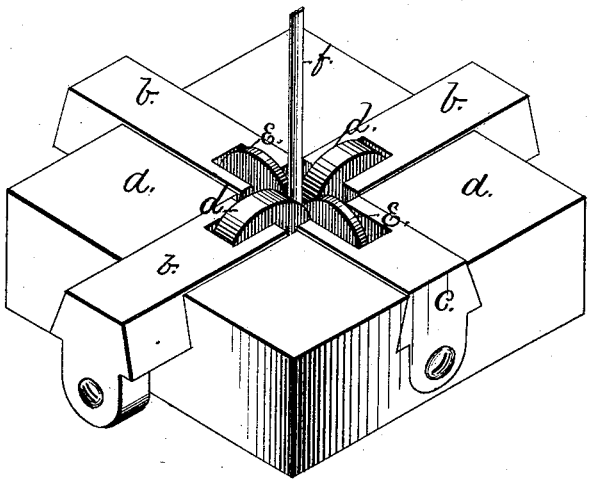
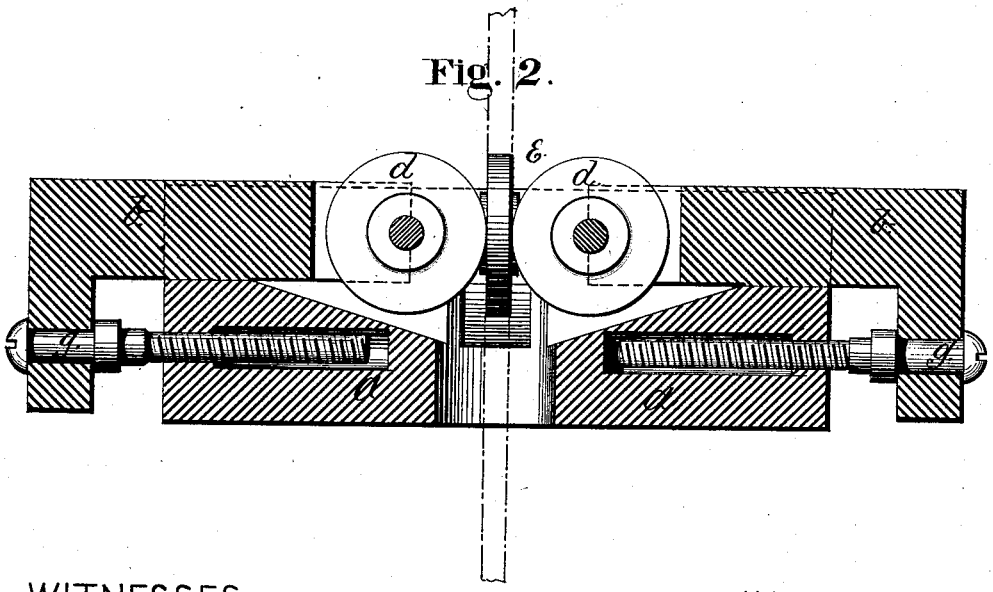


Fig. 2.



WITNESSES.

Henry J. Miller

For A. Miller Jr.

INVENTOR.

James W Cameron

by Joseph A Miller

Attorney

UNITED STATES PATENT OFFICE.

JAMES W. CAMERON, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN WIRE-DRAW PLATES.

Specification forming part of Letters Patent No. **190,195**, dated May 1, 1877; application filed March 22, 1877.

To all whom it may concern:

Be it known that I, JAMES W. CAMERON, of the city and county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Wire-Draw Plates; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a perspective view of my improved wire-draw plate. Fig. 2 is an enlarged sectional view of the same.

This invention has reference to improvements in wire-draw plates used for reducing the size of the wire, and is particularly arranged for drawing wire of a square or parallelogram section, but may be arranged to draw six-sided wire.

The invention consists in the peculiar arrangement, in a wire-draw plate, of drawing-rolls supported in adjustable slides, and arranged so that one pair of rolls extend and roll between the other pair, as will be more fully set forth hereinafter.

In the drawings, *a* is the frame forming the draw-plate. *b b b* are adjustable dovetailed slides, arranged to slide from and to the center in the block *a*. *c* is also an adjustable slide similar to *b b b;* but this slide *c* does not extend outside of the block *a*, and is used to adjust the amount of reduction the wire is subjected to. If the rolls are to be set to roll a given size of wire, the slide *c* is first adjusted so that the disk on the same will be in the proper position, and the opposite disk is brought firmly against the wire. *d d* are rotating disks, having a face wider than the width of the wire to be drawn, and supported in journals in the adjustable slides *b b*. *e e* are two disks, the face of which is the same as the thickness of wire to be drawn, also supported in journals in the adjustable slides *b* and *c*. The sides of the disks *e e* are concaved sufficient to allow only the rims to come in contact with the disks *d d*, between which they roll, so as to avoid friction.

When six-sided wire is to be rolled the disks *e e* are replaced by V-shaped disks, so that the two V-shaped grooves in the disks *e e*, and a space equal to each of the six sides of the wire on the disks *d d*, will form a section of six equal sides.

A variety of sizes of square or parallelogram section can be drawn in this draw-plate by the adjustment of the slides and disks, which cannot be done on the ordinary draw-plates, and as the disks revolve with the wire a smooth and even surface is produced, and the wire can be drawn of perfect section with less strain than in the ordinary manner.

f represents the wire, and *g g* the adjusting-screws.

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

The combination, with the plate *a*, of the adjustable slides *b b b* and *c*, and the disks *d d* and *e e*, arranged and operating substantially as and for the purpose described.

JAMES WALLACE CAMERON.

Witnesses:

JOSEPH A. MILLER,

CHARLES A. WILSON.