2 Sheets--Sheet 1.

J. & S. LAW.

Machine for Rolling Wire.

No. 165,341. Patented July 6, 1875.

FIGS

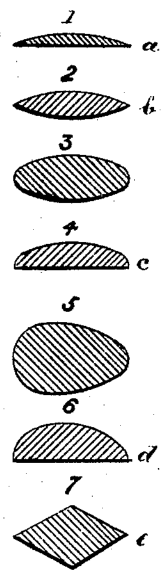
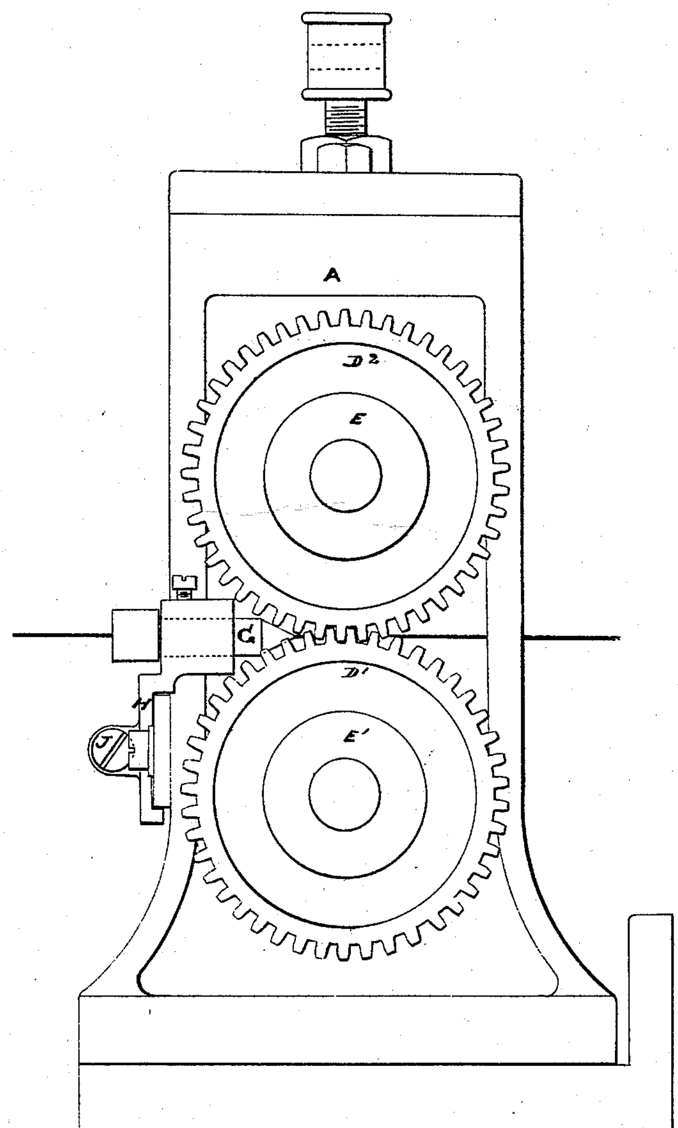


FIG. 8.



Witnesses
Walter Brierley
William ...

James Law
Samuel Law
INVENTORS
John E. Earle

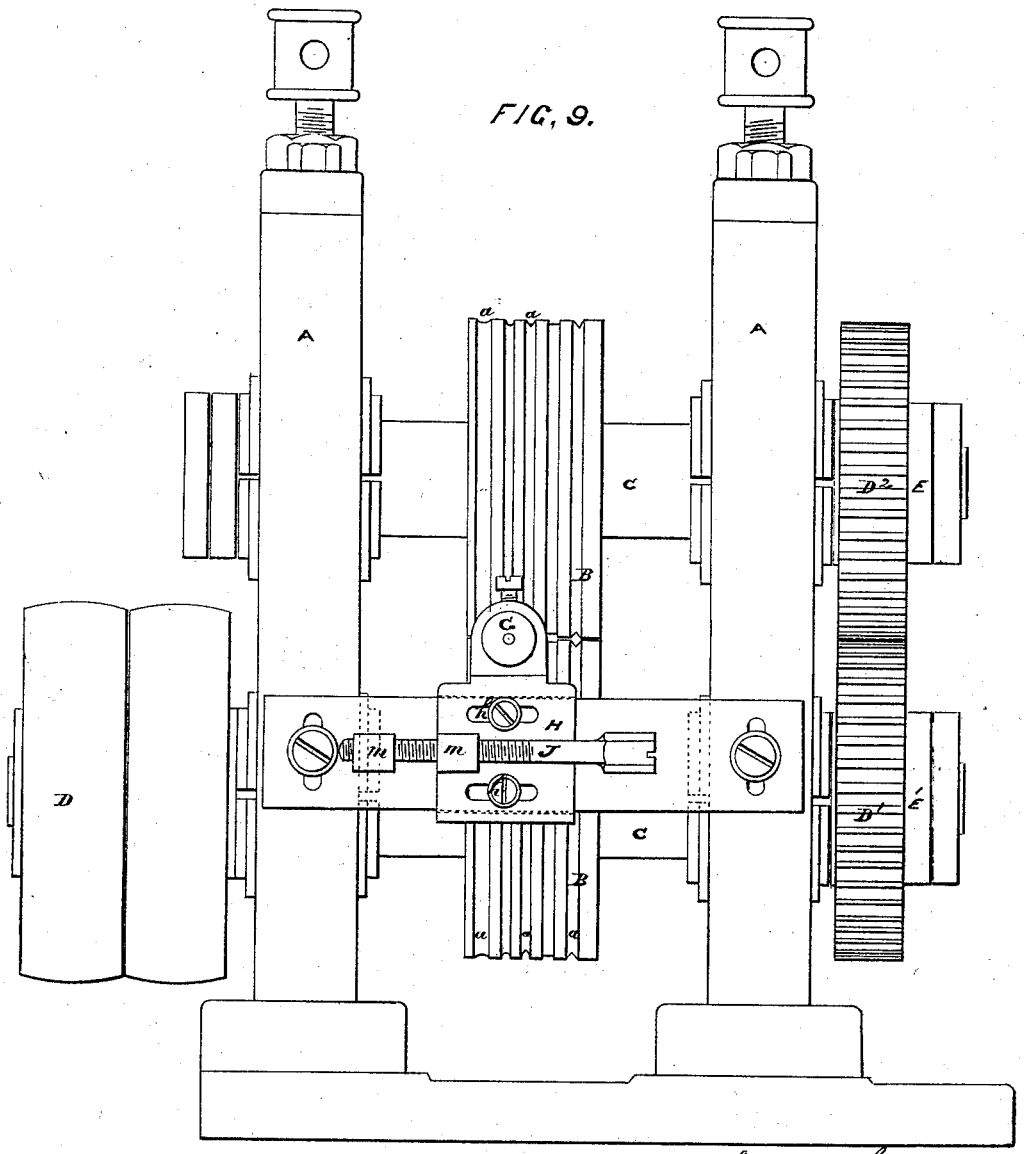
2 Sheets--Sheet 2.

J. & S. LAW.

Machine for Rolling Wire.

No. 165,341 Patented July 6, 1875.

FIG. 9.



Witnesses
Walter Brierley
William Law

James Law
Samuel Law
INVENTORS
John E. Earle

UNITED STATES PATENT OFFICE.

JAMES LAW AND SAMUEL LAW, OF CLECKHEATON, ENGLAND.

IMPROVEMENT IN MACHINES FOR ROLLING WIRE.

Specification forming part of Letters Patent No. **165,341**, dated July 6, 1875; application filed May 31, 1875.

To all whom it may concern:

Be it known that we, JAMES LAW and SAMUEL LAW, of the firm of Samuel Law & Sons, of Cleckheaton, in the county of York, England, have invented certain Improvements in Machinery for Rolling Wire, of which the following is a specification:

This invention was secured to these applicants by Letters Patent in England, dated January 7, 1873, No. 71.

This invention relates to improved forms or sections of wire to be employed in the manufacture of wire cards for carding cotton, wool, and other fibers, and to the construction and use of apparatus for regulating and adjusting accurately the relative grooves in the rollers to each other, and for directing the wire being rolled to the grooves.

At Figures 1, 2, 4, 6, and 7 are shown improved forms or sections of wire. Fig. 8 is an end elevation of the machine employed for rolling the wire, and Fig. 9 is a front view of the same.

A A are the end standards or frames, which carry the rollers B B, in which are cut or formed the grooves *a a a*, and which rollers are fixed or secured upon and rotate with the shaft C C, being driven by the fast pulley D and gear-wheels D^1 D^2. The ends of the shafts C C are reduced in diameter and chased or screwed, and receive the adjusting-nuts E and E′, which are for the purpose of moving laterally the rollers B B, so as at all times to receive exact adjustment of the relative grooves in the top and bottom rollers. The wire, during the process of rolling and shaping, is guided into any particular grooves by means of the conical guide G, carried by the slide-piece H. Conical guide and slide-piece may, on the screws *h h* being eased, be set and adjusted with perfect accuracy, by means of the screw J working through the screwed projections or lugs *m m*.

We make no claim to the use of grooved rollers for rolling wire, nor to the use of oval rolled or shaped wire for card-teeth; but

We claim—

1. In combination with the grooved rollers B B, the adjusting-nuts E E′, for the purpose of adjusting the grooves of the two rolls relatively to each other laterally, substantially as specified.

2. The combination, with the grooved rollers B B, of the conical guide G, adjustable support H, and adjusting-screw J, substantially as and for the purpose specified.

JAMES LAW,
SAMUEL LAW.

Witnesses:
WALTER BRIERLY,
WILLIAM LEE.