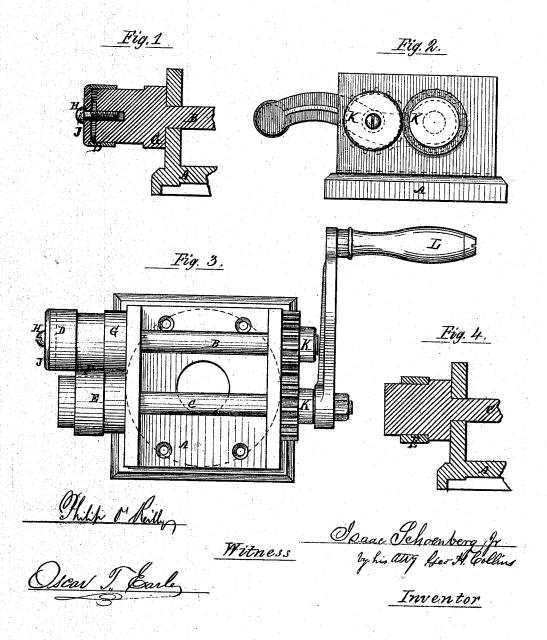
I Schoenberg Culting Frinters Leads. No. 112,384. Falented Mar. 7. 1891.



UNITED STATES PATENT OFFICE.

ISAAC SCHOENBERG, JR., OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR MAKING PRINTERS' LEADS.

Specification forming part of Letters Patent No. 112,384, dated March 7, 1871.

I, ISAAC SCHOENBERG, Jr., of the city, county, and State of New York, have invented certain Improvements in Machines for Making Printers' Leads, of which the following is a specification:

Nature and Object of the Invention.

The nature of my invention is the construction of a machine for making printers' leads of any desired width upon the same shaft or roller by adjustable collars, which can be secured upon the shaft by set screws or keys, or in any suitable manner, the only object being to secure them firmly in position.

Description of the Drawing.

Figure 1 is a cut-section through shaft B. Fig. 2 is an end view of the machine. Fig. 3 is a top view; Fig. 4, a cut-section of shaft c.

General Description.

A is the frame of the machine; B and C. the shaft upon which the adjustable collars D and E are mounted and operated; F, the groove into which the metal is conducted, which groove is formed by the space between the collars and shaft B; G, the stationary collar or shoulder, which may be made upon the shaft B, and in relation to which the adjustable collars are regulated; H, the set-screw regulating collar D; J, the cap which holds

collar D in place. K K' are gear-wheels attached to shafts B and C, giving uniformity of motion; and L, the handle by which the machine may be operated; or it can be moved.

by any suitable mechanism.

In operating my machine I put upon shaft C a collar of the width of leads I desire to produce, and adjust the collar D, by the setscrew H and cap J, to the collar put upon the shaft C, conduct the molten metal into the groove or recess between the collar E and shaft B, and put the machine in motion, and the metal is pressed or carried through the groove in a continuous strip of the desired width and thickness, which can be cut into the lengths desired.

To prevent the machine from becoming heated, cold water can be passed through the shafts when made hollow for that purpose.

Claim.

The combination of the shouldered rolls B and C, the movable and interchangeable collar E, adjustable collar D, cap J, and set-screw H, substantially as described.

ISAAC SCHOENBERG, JR.

Witnesses:

GEO. H. COLLINS, JOHN W. RIPLEY.