# Edwin Wight

114377

### Umbrella Connections

PATENTED MAY 21871

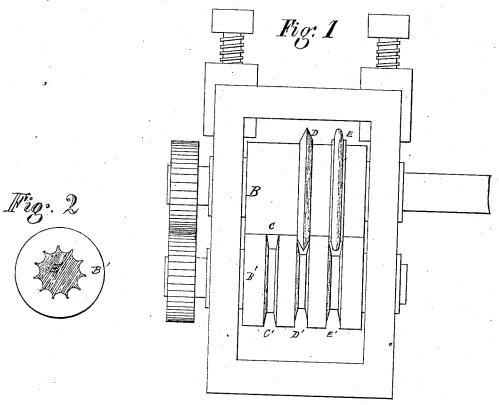


Fig. 3 Fig. 5 Fig. 6 Fig. 7 Fig. 8

Edwin Whight

Witnesses { Edn Brown John F. Grant

## United States Patent

### EDWIN WIGHT, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 114,377. dated May 2, 1871.

#### IMPROVEMENT IN ROLLS FOR ROLLING UMBRELLA-CONNECTIONS.

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

I, EDWIN WIGHT, of the city and county of Philadelphia and State of Pennsylvania, have invented an improvement on my patent of October 25, 1870, for an Improved Mode of Making "Umbrella-Connections," of which the following is a specification.

The nature of my invention consists in rolling the connections into form by passing the metal between properly-grooved rollers, after which the connections are separated and finished in the present usual mode and attached as joints to umbrellas and parasols.

To enable those skilled in the art to make and use my invention, I will proceed to describe the construction of the machine and mode of operation, reference being had to the accompanying drawing, in which-

Figure 1 is an elevation through the rolls. Figure 2 is a cross-section through the lower roll. Figures 3, 4, 5, sections through the strips at various stages of the operation.

Figure 6 is a side view of the strips, part having

passed through the notohing-rolls.

Figures 7 and 8 show the connection finished and

secured to the rib of the umbrella.

My made of manufacture is this:

Fig I shows the pair of rolls B B geared together and driven by power as used by metal-workers.

The upper roll B has grooves and beads, as shown at O D E, fitting into certain-shaped grooves O' D' E in the lower roll.

A piece of annealed wire, sheet-brass, or other metal. rectangular in section-and it may be from one foot to one hundred feet long—is passed through form O O', which gives it a slight taper, as in section, fig. 3, It is then passed through form D, which is shaped as a sharp-pointed V4 the lower groove D' being rectangular, with a slight taper.

Fig. 4 shows the section of the strip after passing

through form D D'.

The strip then passes through form E, where the V-shaped groove is changed into a half-round groove, and the form E', in the under roll B', is shaped as shown in section, fig. 2. This gives a notching or toothed appearance to the strips, as shown in fig. 6, where a portion of the strip is shown as having passed through form E E'.

The connections h' are then sawn off and secured to the steel rib k in the usual manner, as shown, figs. 7 and 8.

I claim-

The devices upon the rolls B B, as indicated by the letters D D' and B E', for molding and notching a strip of metal for the purpose herein set forth.

EDWIN WIGHT:

Witnesses:

EDWD. BROWN, JOHN F. GRANT.