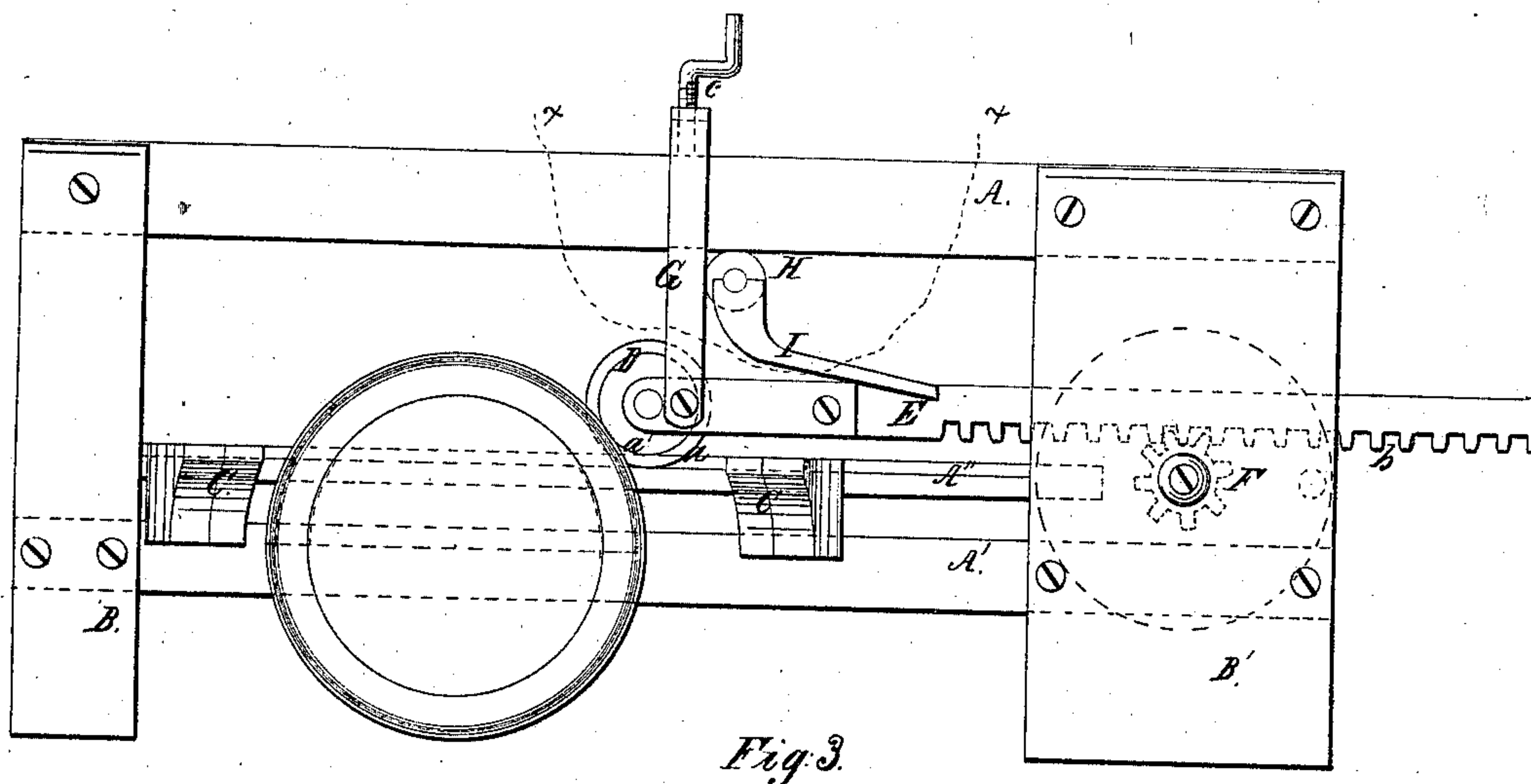
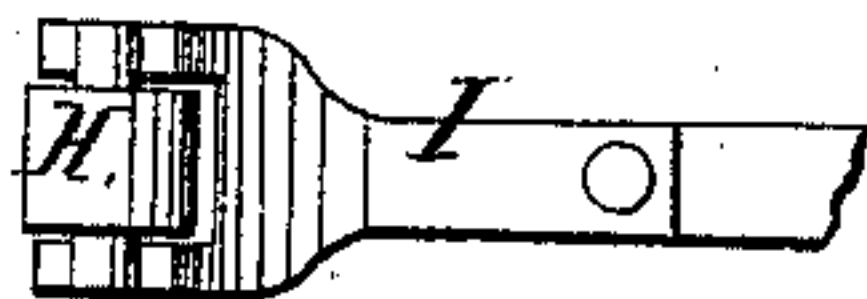


*F. M. Woods,*  
*Wiring Sheet-Metal Fans.*  
*N<sup>o</sup> 58,162. Patented Sep. 18, 1866.*

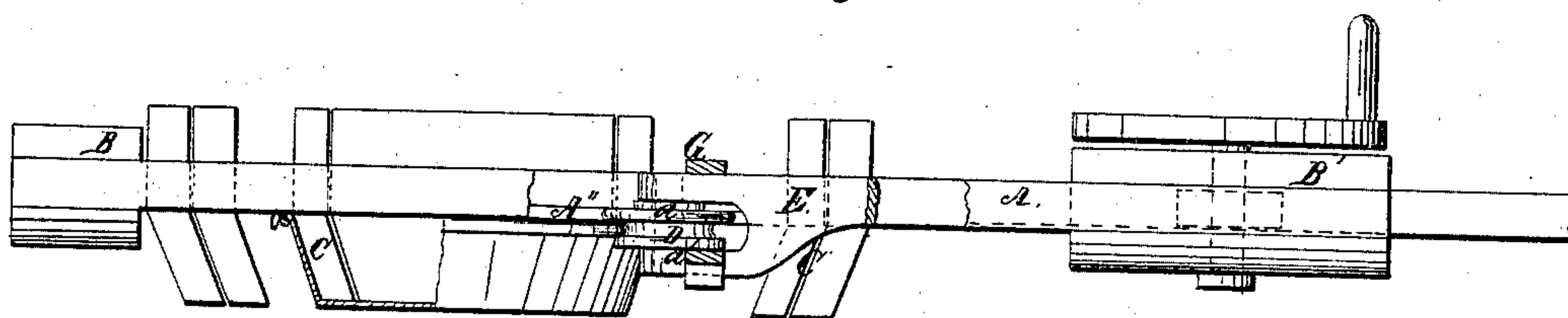
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



*Witnesses:*

*Geo B. Loring*  
*Geo. T. Welch*

*Inventor:*

*F. M. Woods*  
*Per. Munn & Co.*  
*Atys.*

# UNITED STATES PATENT OFFICE.

F. M. WOODS, OF YORK, ILLINOIS.

## IMPROVED MACHINE FOR WIRING SHEET-METAL PANS.

Specification forming part of Letters Patent No. **58,162**, dated September 18, 1866; antedated September 2, 1866.

*To all whom it may concern:*

Be it known that I, F. M. WOODS, of York, in the county of Clark and State of Illinois, have invented a new and Improved Machine for Wiring Sheet-Metal Pans; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan sectional view of the same, the line of section being indicated by *x x*, Fig. 1; Fig. 3, a detached plan or top view of a roller pertaining to the same.

Similar letters of reference indicate corresponding parts.

This invention consists in the employment or use of a series of movable or adjustable sections placed in a suitable frame, and arranged with an adjustable pressure-wheel in such a manner that pans of different sizes may be wired expeditiously in a perfect manner, and with one and the same machine, as hereinafter fully shown and described.

A A' A'' represent three horizontal bars, the ends of which are secured in uprights B B'. These parts constitute the framing of the machine.

The two lower bars, A' A'', serve as guides for a series of sections, C, which are fitted between said bars in such a manner that they may slide freely, and be adjusted either to the right or left, said sections having an oblique position at the front or face side of the machine to correspond to the flaring form of the pan (shown in red) and admit of the latter being fitted on or over the former, as shown in Fig. 2, a sufficient number of sections being used to admit of pans of different sizes being adjusted to the machine, as will be fully understood by referring to Fig. 2.

The pans are swaged in proper form, with a groove in their edge to receive the wire, by any suitable machine, and the wire is placed in said groove, and the pan, when adjusted on the sections, is ready to be operated upon by the wheel D. This wheel has a grooved pe-

riphery, which forms two flanges, *a a'*, the flange *a* extending rather beyond the flange *a'* and bearing on the bar A'' of the framing of the machine, the flange *a'* projecting beyond the side of the bar A.'' The wheel D is fitted in a fork at one end of a bar, E, which has a rack, *b*, at its under side, a pinion, F, gearing into the rack, the axis of which has a crank or pulley attached for the convenience of turning it for moving the bar E and wheel D.

The inner end of the bar E has a yoke, G, attached to it, which extends over the upper bar, A, of the framing, and has a set-screw, *c*, passing through it, which rests or bears on the bar A.

H is a roller attached to an elastic arm, I, on bar E. This roller bears against the under side of the bar A, and keeps the wheel D in place in being adjusted to its work.

After the pan is fitted to the machine on the sections C the wheel D is adjusted to the edge of the pan by moving the bar E, the screw *c* of the yoke G being turned so as to let the wheel D down against the pan, the wheel having been previously raised by means of this screw and yoke to admit of the pan being fitted on the sections. By turning the pan with the wire fitted in its groove the flange *a'* of the wheel D closes or bends the edge of the pan around the wire.

The device is extremely simple and efficient, and may be used as an ordinary bench-tool.

I would remark that the wheel D may be made in two parts and arranged with set-screws, so that the flanges *a a'* may be adjusted at a greater or less distance apart to suit different-sized wire.

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

The sliding sections C, in combination with the adjustable grooved wheel D, arranged in a suitable framing, to operate in the manner substantially as and for the purpose herein set forth.

F. M. WOODS.

Witnesses:

WILLIAM B. HODGE,  
JONATHAN VERMILLION.