

E. MANLEY.

Apparatus for Measuring and Cutting Wire.

No. 152,139.

Patented June 16, 1874.

Fig 1.

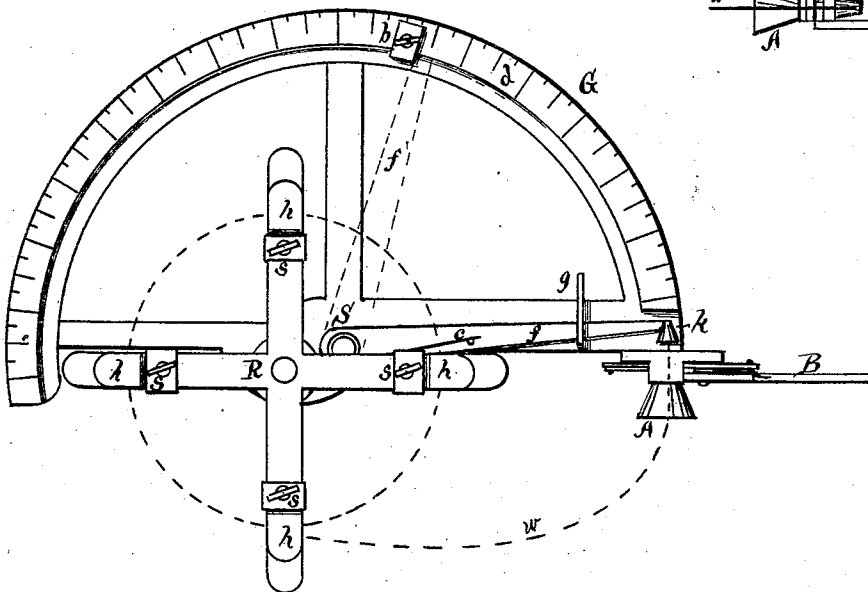


Fig 3.

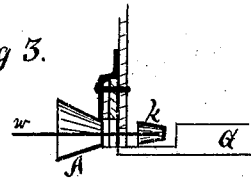
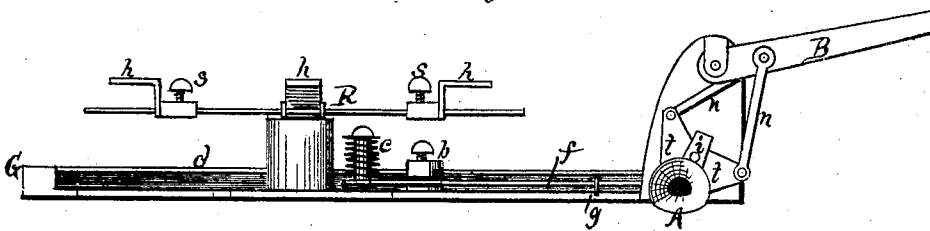


Fig 2.



Witnesses.

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EMMONS MANLEY, OF MARION, NEW YORK.

IMPROVEMENT IN APPARATUS FOR MEASURING AND CUTTING WIRE.

Specification forming part of Letters Patent No. **152,139**, dated June 16, 1874; application filed February 17, 1874.

To all whom it may concern:

Be it known that I, EMMONS MANLEY, of Marion, in the county of Wayne and State of New York, have invented a new and useful Apparatus for Measuring and Cutting Wire; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top or plan view of my invention. Fig. 2 is an elevation of the same, showing the front of the cutting mechanism and the reel R. Fig. 3 is a vertical central section through the guide-funnel A, and the socket *k* on the discharge-arm *f*.

This invention consists in the employment of a segmental measuring-groove, into which the wire is forced by the attendant, and from which it is discharged by a spring-arm when the cutters are opened after the wire is cut off.

The object of my invention is to provide a cheap and convenient wire measuring and cutting apparatus for tinsmiths, for measuring and cutting the wires used in the upper edge of pails, pans, cups, &c.

The segmental groove G may be made of any suitable metal, and should be deep enough vertically to permit of the free passage of the socket *k*. This groove G may be made sufficiently large in diameter that about one-half a circle shall measure the longest wires required in the trade—say three or four feet. A gage-clamp, *b*, is secured to the upper lip *d* of the groove, upon which lip the graduated scale is marked, as shown in Fig. 1. The wire-reel R is mounted upon an offset on the cross-bar or main plate S, and to the arms of said reel I attach adjustable wire-holders *h*, which, by means of the clamping-screws *s*, may be placed and secured to any desired point along the arms. The arm *f* of the discharging-socket *k* is pivoted to the plate S, as shown, and is so connected with the spiral spring *c* as to be thrown to, and held when at rest in, the position shown in full lines. The loop *g* prevents the arm from being thrown above the upper

lip of the groove during the first portion of the stroke, when the wire is being pushed in. The cutters *t* are pivoted to the upright C on a common center at *i*. They are actuated by the hand-lever B through the links *n*.

The cutters are shown open in Fig. 2, as when the wire is being pushed in and as the end of the wire strikes in the socket *k*; the latter is forced around to the gage *b*, wherever that may be located along the segment, and, as will be seen, the wire always presses snugly against the outer wall of the groove, thereby insuring a correct measurement of the wire every time.

The gage *b* is first set so as to give the exact length of wires required for any work or sized dishes into which they are to enter. The wire is placed upon the reel, and one end stuck through the funnel A, as indicated by the dotted circle in Fig. 1, and shoved in until the socket *k* strikes the gage. The lever B is then forced down by the right hand of the operator, which cuts off wire; the lever is raised, and the instant the cutters part from in front of the wire just cut off it is at once thrown out by the spring *c*, the socket *k*, also, thereby being returned to the position to again receive the end of the wire, and the operation is repeated.

It will be seen that by this means the wires are cut of the most perfect uniformity of length, and also very rapidly, and the wire is not straightened.

What I claim as my invention is—

1. The segmental measuring-groove G, in combination with the socketed spring discharger-arm *f*, all constructed substantially as described, for the purposes set forth.

2. In combination with the segmental wire measuring and cutting apparatus and the spring wire-discharger, the guide-funnel A, for the purposes set forth.

EMMONS MANLEY.

Witnesses:

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