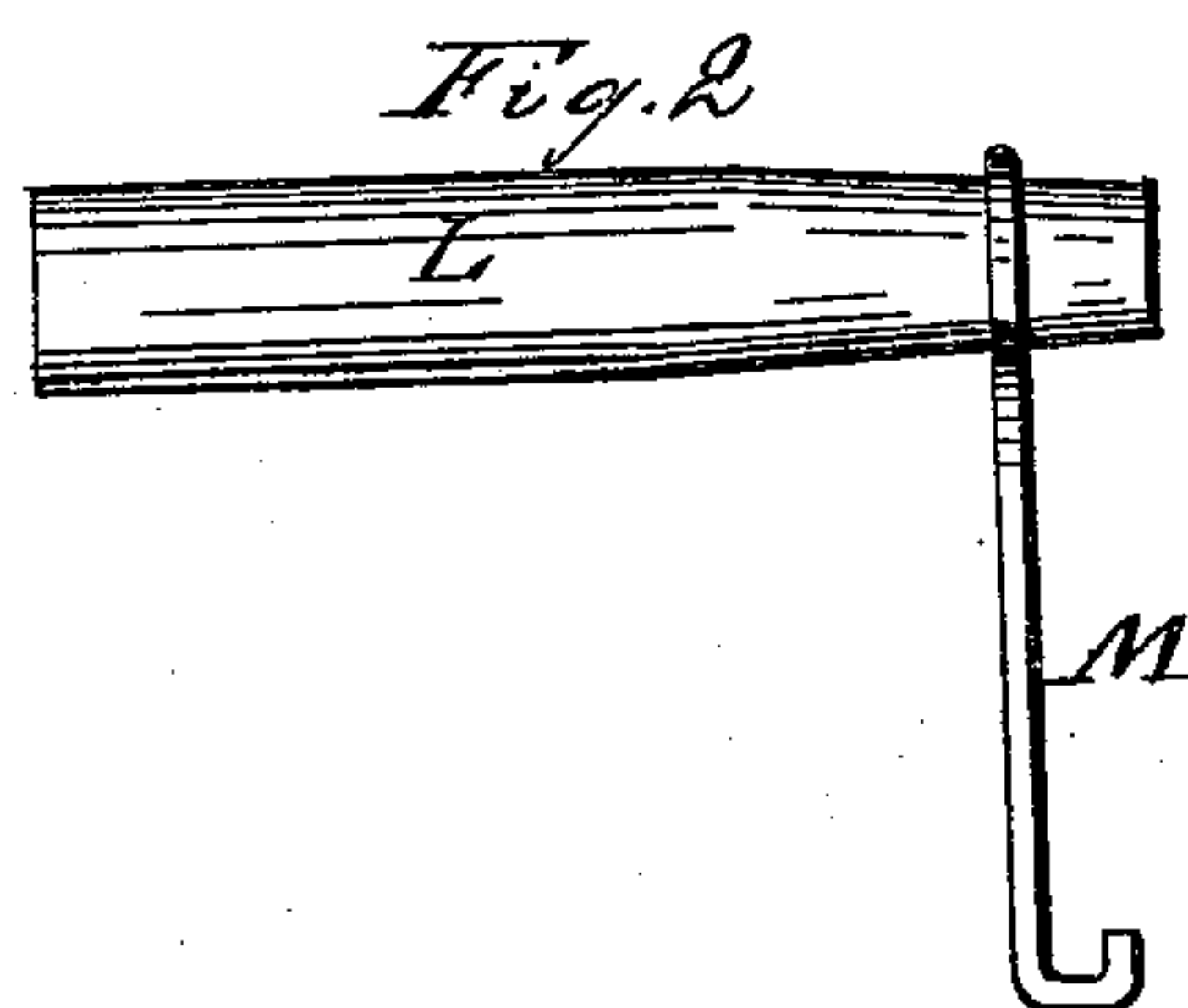
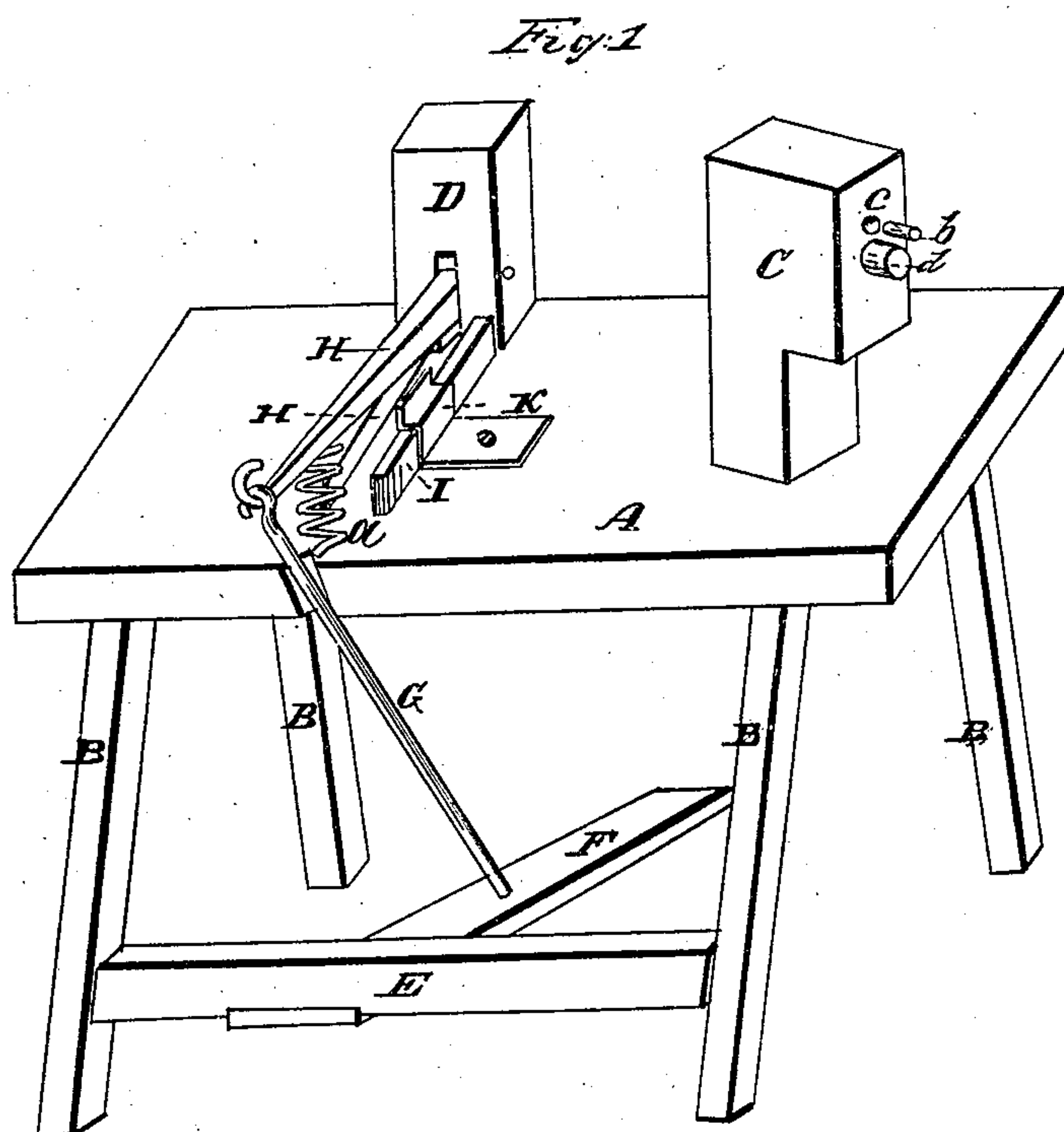


R. S. WILLARD.
Making Wire Hooks.

No. 85,498.

Patented Dec. 29, 1868.



Witnesses

W. H. Hamblin
Leopold Neub

Inventor

R. S. Willard
per Alexander Thalm.
Atty

United States Patent Office.

R. S. WILLARD, OF FRANKLIN, VERMONT.

Letters Patent No. 85,498, dated December 29, 1868.

MACHINE FOR MAKING WIRE HOOKS.

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

To all whom it may concern:

Be it known that I, R. S. WILLARD, of Franklin, in the county of Franklin, and in the State of Vermont, have invented certain new and useful Improvements in Machines for Making Wire Hooks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a machine for the manufacture of wire hooks, so constructed that the wire is bent around a cylinder, and a movable pin, to form the ring at the upper end, and then inserted under a lever, to form the hook at the lower end; said wire hooks being used by sugar-makers when tapping the sugar-tree.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the machine, and Figure 2 is a view of a hook suspended.

A represents a table, resting on four legs, B B. On top of this table are two standards, C and D, the one marked C being provided on one side with a stationary cylinder, *a*, stationary pin, *b*, and a hole, *c*, for the insertion of another pin.

In the other standard, D, a lever, H, is pivoted, which lever works between two bars, I I, on the table, and is connected, by means of a rod, G, with the treadle F, which is secured to a cross-bar, E, pivoted in the sides of two of the legs.

Under the front end of the lever is a spiral spring, *d*, the use of which is to raise the lever when the pressure on the treadle is removed.

On one of the bars I is a metal gauge, K, secured, which serves to regulate the wire when the hook is being formed.

The operation is as follows:

The operator sits on the opposite side from the treadle, takes the wires, which are cut any required length, in the right hand, and places the end thereof between the cylinder *a* and stationary pin *b*, the wire pointing from the operator downward. He then bends the wire around the cylinder until it strikes the pin *b*, on the upper side, when a shaft or pin is inserted in the hole *c*, and the wire bent back to a line straight across the ring thus formed.

The operator on the other side takes as many of these wires as he can hold in one hand, and places the straight ends thereof on the bars I I, under the lever H, and against the gauge K. The said lever being pressed down by the foot on the treadle F, forms the hook on the lower end.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the lever H, bars I I, and gauge K, with the spring *d*, rod G, and treadle F, all constructed as described, and operating substantially as and for the purposes herein set forth.

2. In combination with the foregoing, the standard *c*, with cylinder *a*, stationary pin *b*, and a hole for the insertion of a movable shaft or pin, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 3d day of June, 1868.

R. S. WILLARD.

Witnesses:

N. TEMPLE,
JAMES RANDALL.