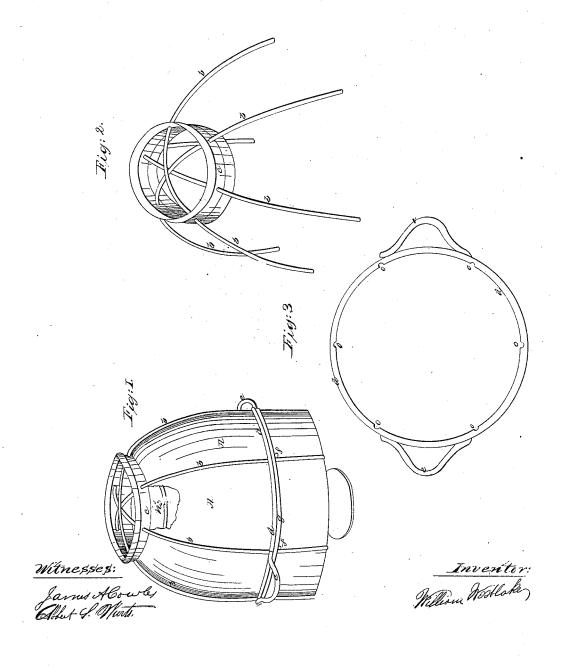
## M. Nestlake, Wire-Working Tool. Nº50.538. Patented Oct.17,1865.



## UNITED STATES PATENT OFFICE.

WILLIAM WESTLAKE, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF, JAMES E. CROSS, AND JAMES F. DANE, OF SAME PLACE.

## IMPROVEMENT IN MACHINERY FOR MANUFACTURING LANTERNS.

Specification forming part of Letters Patent No. 50,538, dated October 17, 1865.

To all whom it may concern:

Be it known that I, WILLIAM WESTLAKE, of Chicago, in the county of Cook, in the State of Illinois, have invented a new and useful Improvement in Machinery for Manufacturing Lanterns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which-

Figure 1 is a plain upright view of the machine with the guard all on. Fig. 2 are the guards when ready to be applied to the block.

Fig. 3 is the spacer.

This invention applies more particularly to the manufacture of the guard or protectors which surround the globe of the lantern. Its object and nature is to supply what has hitherto been wanting in this particular department of manufacturing a lantern—a cheap and efficient machine, whereby the process is greatly facilitated and the expense is greatly reduced in manufacturing a lantern.

A A, Fig. 1, is a block, usually made of wood. It may, however, be made of iron or other metal—made in such shape as is desired the guard of the lantern to conform to and of the length desired, which also determines the

length of the guards.

b b b b are the guards of the lantern, which

are made on this machine.

c c is the metallic mounting, which is placed at the top of a lantern, and to which is attached the guard at the upper end.

d d, Fig. 3, is a spacer. e e are notches at equal distances apart on the inside of this spacer.

ff are rests projecting from the block A A, and all located in one horizontal plane around the block A A.

g is a horizontal guard attached to the vertical guards b b b.

n is a fragmentary section removed from the upper part of the block A A, which more clearly shows the exact position the mounting c occupies when placed upon the block, and also shows that all that part of the block which comes on the inside of the mounting c is removed.

The operation of my invention is as follows:

length required, with that portion on the inside of the mounting cremoved to the depth of about one inch. I then take wires made of the metal I desire to use and cut them of the required length and insert them in the mounting c, as shown in Fig. 2. They are thus permanently fastened to the mounting. I then take the mounting and place it upon the block A A, inserting it in the space made hollow in the upper part of the block. The guards are then bent to conform to the side of the block by passing over the block the horizontal guard g. This horizontal guard is pushed down until it reaches the rests ff. The spacer d d is then placed over the guards, and a vertical guard fits into each notch o of the spacer. This spacer is pushed down until it rests upon the guard g. The notches o o o in the spacer d d being equidistant, the vertical guards are consequently equidistant, and the horizontal guard g resting upon the rests f f the guards b b and g are, from necessity, perpendicular to each other. Should the guards b b extend lower than the block A A the block is turned over, and with a pair of hand-nippers they are clipped off to the exact length of the block. The parts being thus arranged they are soldered together, the spacer d d is removed, and the guard is ready to be taken from the block and submitted to further and additional manipulation, not necessary to be described, for the purposes of this invention.

The advantages of this improvement are as follows: The guards b b b b are bent directly to the shape and form desired, when the horizontal guard g is pushed down upon the rests ff. By the use of the spacer  $d \tilde{d}$  the vertical guards b b are all placed equidistant apart, and these same guards are all made of uniform length by being nipped at the lower end, so as to conform to the exact length of the block.

This improvement also enables a young and inexperienced workman to make a lanternguard perfect and complete in form, shape, and size with the best and most experienced workman. He cannot make it otherwise, as when finished it must conform to the block A A, the vertical guards b b must be equidistant apart, as they conform to the notches oo in the spacer d d, and the horizontal guard g must be per-The block A A is first made of the shape and | pendicular to the guards bb, because it is placed

same plane around the block A A, thus securing a symmetry and a right and just proportion in all the parts forming the guard part of the lantern. Every guard is also made pre-cisely alike in length and form.

I do not confine my invention to any particular length of block, but any length suited to the size and length of lantern I desire to make; nor do I confine myself to any number of rests.

Having thus described my invention, what

upon the rests ff, which are all located in the | I claim as new, and desire to secure by Letters Patent, is-

1. The block A A when made in the form and for the purpose as described.

 The spacer d d, when made as described.
The combination of the spacer d d and the block A A, in the manner described.

## WILLIAM WESTLAKE.

Witnesses:

JAMES A. COWLES, ALBERT S. WURTS.