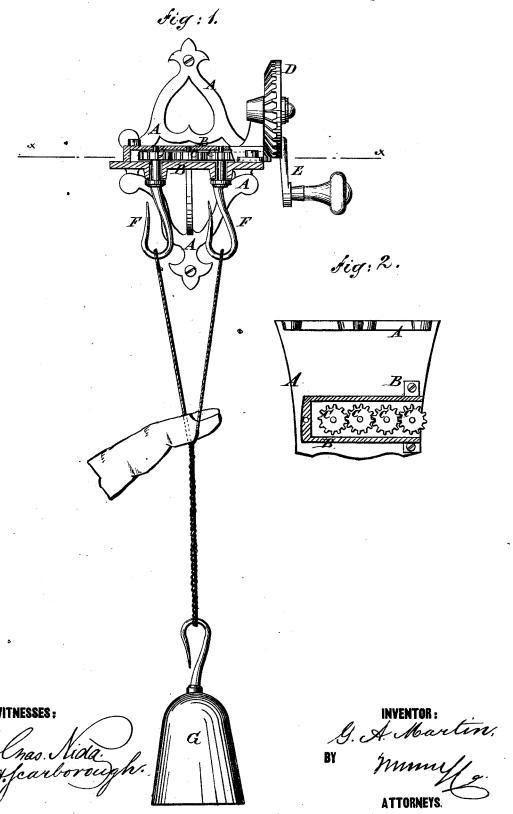
## G. A. MARTIN.

## MACHINE FOR TWISTING WHIP-LASHES.

No. 189,637.

Patented April 17, 1877.



## UNITED STATES PATENT OFFICE

GEORGE A. MARTIN, OF MYERSTOWN, PENNSYLVANIA.

## IMPROVEMENT IN MACHINES FOR TWISTING WHIP-LASHES.

Specification forming part of Letters Patent No. 189,637, dated April 17, 1877; application filed March 12, 1877.

To all whom it may concern:

Be it known that I, GEORGE A. MARTIN, of Myerstown, in the county of Lebanon, and State of Pennsylvania, have invented a new and useful Improvement in Whip-Lash Twister, of which the following is a specification:

Figure 1 is a front view of my improved machine partly in section to show the construction. Fig. 2 is a top view of the same, partly in section through the line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish a simple and convenient machine for twisting whip-lashes, and other cords, evenly and expeditiously.

The invention consists in the combination of the crank gear-wheel, the train of gear-wheels, the hooks, and the weight, with each other, and with the box, and the plate or

frame, as hereinafter fully described.

A is a plate, frame, or bracket, provided with screw-holes to enable it to be readily secured to a wall or other support. Upon the frame A is formed, or to it is attached, a box, B, in which are pivoted four small gear-wheels, C, meshing into each other. The first gear-wheel C also meshes inter a large bevel-gear wheel, D, pivoted to a support attached to the box B, or frame A, and to which is attached a crank, E, by means of which the machine is operated. To the journals of the second and fourth gear-wheels C are attached, or upon

them are formed, hooks F, to which the ends of the strands to be twisted are attached.

This arrangement of the gear-wheels C, causes the hooks F to be revolved in the same direction and at the same speed, so that the strands may be twisted evenly and in the same direction. By adding other gear-wheels and hooks, a three or more strand lash may be twisted. The other ends of the strands are brought together, and are attached to a weight, G, of sufficient size to give the necessary tension to the strands. In using the machine the finger, a pin, or other suitable instrument is held between the strands to cause them to twist together from the lower end, which is slowly and gradually raised as the cord receives the desired twist, the cord receiving a hard or loose twist according as the finger or instrument is moved upward more or less slowly.

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

ent-

In a machine for twisting whip-lashes, the combination of the crank-wheel E D, train of gear-wheels C, hooks F F, and weight G, all arranged and operating substantially as shown and set forth.

GEORGE A. MARTIN.

Witnesses:

HENRY KREITZER, DANIEL P. RODEARMEL.