

E. A. KITZMILLER & W. J. SMITH.
Painting Broom-Handles.

No. 150,962.

Patented May 19, 1874.

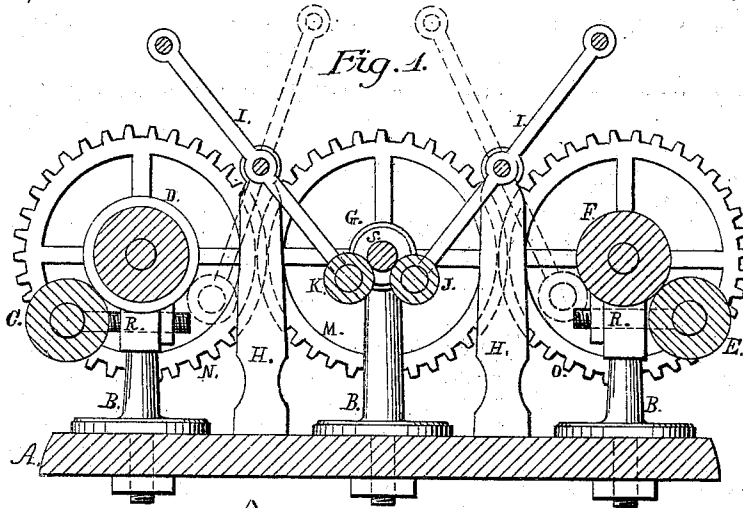
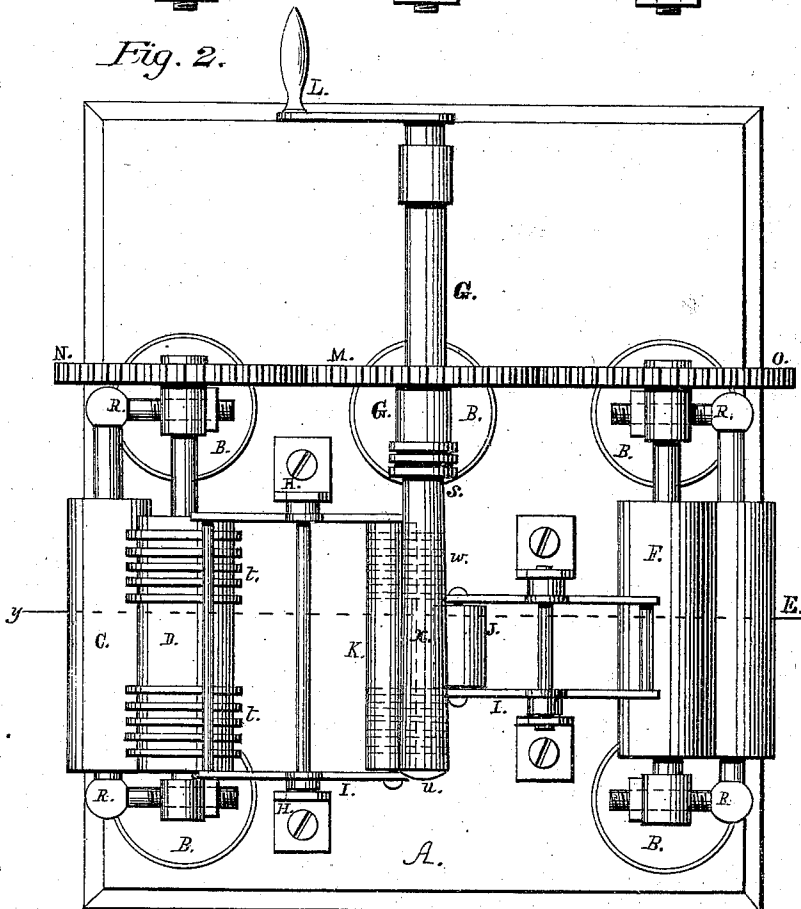


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWARD A. KITZMILLER AND WILLIAM J. SMITH, OF PITTSBURG, PA.

IMPROVEMENT IN PAINTING BROOM-HANDLES.

Specification forming part of Letters Patent No. **150,962**, dated May 19, 1874; application filed March 18, 1874.

To all whom it may concern:

Be it known that we, EDWARD A. KITZMILLER and WILLIAM J. SMITH, both of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Apparatus for Painting and Ornamenting Broom-Handles and other cylindrical articles; and we 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 our invention consists in the combination of paint-distributing rolls, painting-rolls suspended in pivoted frames, and a hollow revolving shaft for receiving and rotating the broom-handle during the operation of painting it.

To enable others skilled in the art with which it is most nearly connected to make and use our invention, we will proceed to describe its construction and operation.

In the accompanying drawings, which form part of our specification, Figure 2 is a top view or plan of our improved apparatus for painting and ornamenting broom-handles. Fig. 1 is a vertical section of the same at line *y* of Fig. 2.

In the accompanying drawings, A represents the base of the machine, on and to which are secured the standard-bearings B for the axes of the paint-distributing rolls C D E F, and for the hollow shaft G, which receives and rotates the broom-handle during the operation of painting it. To the base are also secured the supports H, for the pivoted frames I, in which are pivoted the painting-rolls J and K. On the hollow shaft G is secured a hand-crank, L, and a driving-wheel, M, into which gears the wheel N on the axis of the paint-distributing roller D, and the wheel O on the axis of the paint-distributing roller F.

The revolving of the hollow shaft G will revolve the wheel on it, which will cause the wheels N and O to rotate and revolve the rolls D and F, which will revolve the rolls C and E, which are pivoted in adjustable bearings

R, whereby the pressure of the latter rolls on the former rolls can be regulated.

The outer surface of the several rolls, herebefore described, should be sufficiently flexible to yield to each other without any undue rubbing action, and the painting-rolls should be sufficiently flexible to yield to any slight irregularity in the surface of the broom-handle.

The material for forming the rolls, or the surface of the rolls, we leave to the judgment of the skillful mechanic.

The hollow shaft may be revolved by means of pulleys and belt, when so desired.

As the construction of our improved apparatus or machine for painting and ornamenting broom-handles will be readily understood from the foregoing description and by reference to the accompanying drawings, we will, therefore, proceed to describe its operation.

The broom-handle is placed in the hollow shaft G, as indicated at *s*, and the paint is spread by any suitable means on the rollers C and E, which will distribute it on the rollers D and F, with which the operator, through the medium of the frames I, brings in contact the painting-rolls J and K for the purpose of receiving the paint. After the rolls J and K have received their paint they are brought in contact with the revolving broom-handle, which revolves the said rolls and receives the paint from them.

The whole operation of painting a broom-handle does not require more than five seconds of time.

It will be observed that the roll F has a series of projecting rings, marked *t*, which distribute the paint on the roll K, forming rings of paint around it, which are subsequently painted on the broom-handle *u* by bringing the roll K in contact with it, thereby painting on the handle, as indicated at *w*, the roll J painting the part of the handle between the rings marked *x*.

It will readily be observed that various configurations may be painted on the handle or thing to be painted, by simply changing the

contour of the periphery of the rolls D and F, or J and K, and also that one, two, or more colors may be used at the same time.

Having thus described our improvement, what we claim as of our invention, is—

The combination of paint-distributing rolls, painting-rolls, pivoted in frames, and hollow revolving shaft for receiving and rotating the broom-handle, the several parts operat-

ing conjointly with each other, substantially as herein described, and for the purpose set forth.

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Witnesses:

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