B. H. Green.

Printing-Telegraph Wires.

No. 6,012. Patented Jan. 9, 1849.

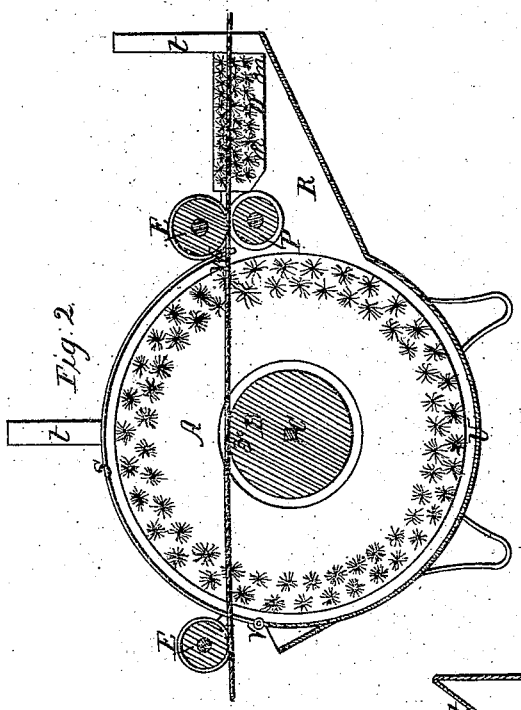

Fig. 2.

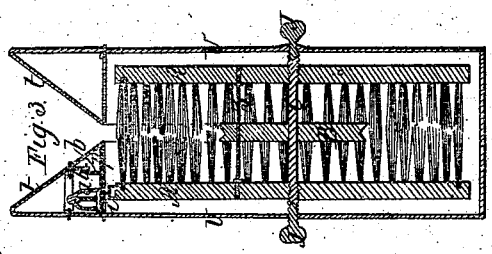

Fig. 3.

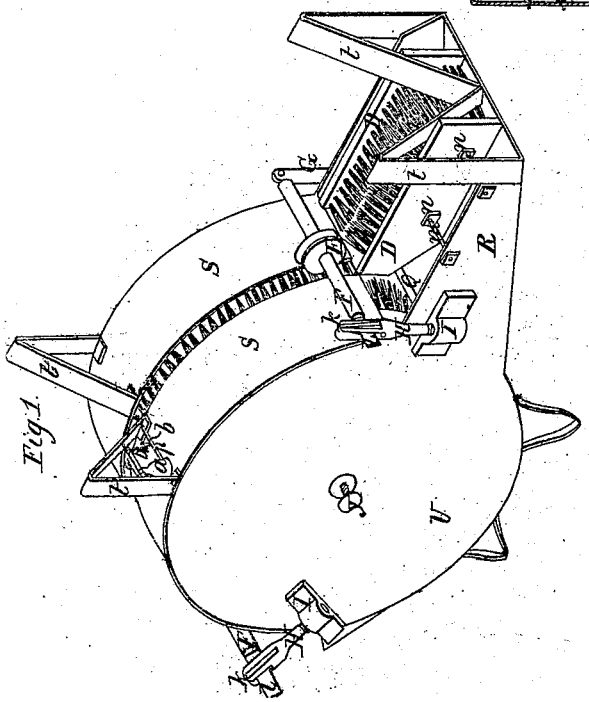

Fig. 1.

Fig. 4.

THE ECKERT LITHOGRAPHING CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BENJ. H. GREEN, OF PRINCETON, NEW JERSEY.

IMPROVEMENT IN PAINTING TELEGRAPH-WIRES.

Specification forming part of Letters Patent No. 6,612, dated January 9, 1849.

To all whom it may concern:

Be it known that I, BENJAMIN H. GREEN, of Princeton, in the county of Mercer and State of New Jersey, have invented a new Apparatus for Aiding in the Painting or Coating of Telegraph-Wires, or for other purposes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the apparatus; Fig. 2, a longitudinal vertical section; and Fig. 3 a vertical transverse section. Fig. 4 is a section of a portion of the apparatus detached.

Similar letters indicate like parts in all the figures.

U is the paint-box of a circular form, having an offset, R, from the rear side of its periphery, which I generally construct of light sheet-metal.

C is a shaft passing transversely through the center of U, supported by and turning on the pivot-points of the screws J J, which work in female screws secured to the center to the sides of the paint-box, as shown in Fig. 3. The shaft C has right and left hand screws cut upon it, extending inward from each end.

A A are brush-wheels having female screws formed in apertures in their centers, which are received onto and fit the screws on the ends of the shaft C.

B is a grooved pulley made fast to the center of the shaft C. The brush-wheels A A are retained in their proper position, and made to turn with the shaft C by means of the rod Z passing through apertures in the pulley B and in each of the brush-wheels. The rod Z is kept in place by nuts working on right and left screws on each end of the rod. The bristles are inserted into the inner surfaces of the brush-wheels, near their peripheries, and the wheels are adjusted at such a distance from each other that the inner ends of the brushes of bristles meet and pass by each other for a short distance.

D D are straight brushes placed opposite to and facing each other in the offset R, supported by the rods *m m*, which pass through the backs of the brushes, and have their ends made fast to the sides of the offset. The faces of the brushes D D are pressed against each other with considerable force by means of the nuts *n n* working on screws cut upon the rods *m m*.

The top of the paint-box U is in two parts, S S, secured thereto by hinges *v* and hooks *w*, (shown in Fig. 2,) with sufficient space left between the covers to admit a telegraphic cord or wire to pass between them into the position represented in Fig. 2.

The painting or coating apparatus is placed upon and suspended to telegraphic wires in the manner represented in Fig. 2. The axles F F of the grooved pulleys E E, by which the apparatus is suspended, are connected at one end by hinge-joints to the hangers G G, and their opposite ends pass into slots in the upper ends of the hangers H H, in which they are caught and retained by the spring-catches *k k*, as shown in Fig. 4. The hangers G G and H H have screws cut on their shanks that are received into female screws in the ears I I secured to opposite sides of the paint-box U. By this manner of securing the bearing or suspending axles to the paint-box the apparatus can be readily placed upon or taken from the wires, and the suspending-pulleys can be so adjusted in their positions as to cause the wire to bear with sufficient force upon the pulley B on the shaft C to cause the brush-wheels A A to revolve as the apparatus is drawn along the wire.

P is a grooved guiding-pulley on the shaft Q, placed immediately under the rearmost suspension-pulley, E, between which pulleys the wire passes.

t t are guides for readily directing the wire into the opening between the covers S S and between the straight brushes D D.

a is a signal-bell suspended under one of the guides *t*, as shown in Figs. 1 and 3, which is made to ring at each revolution of the brush-wheels by means of the projection *i* on the periphery of one of the wheels, striking against an arm descending from the spindle *p*, which spindle is connected to the axle of the bell by the arms *b b*, and thus serves to indicate to the person who may be drawing the apparatus along the telegraphic wire that the brush-wheels are in motion.

The operation of my painting or coating apparatus is as follows: The paint-box having been supplied with the requisite quantity of paint or other coating matter, the apparatus is placed upon the telegraphic wire or wire

cord, and the suspension-pulleys E E are so adjusted as to cause the wire to bear with sufficient force upon the pulley B to cause its friction to revolve the brush-wheels as the apparatus is moved along the same. The rotation of the brush-wheels deposits the paint upon the wire as the apparatus is moved thereon, and the stationary brushes D D, between which the wire then passes, serve to force the paint or other coating matter into the interstices, where several small wires are laid together into a telegraphic cord, and also to remove the surplus paint and give a smooth surface to the wire or cord. The surplus paint or coating matter removed by the brushes D D from the wire falls into the inclined bottom of the offset R, which conducts it into the paint-box U.

The wire for telegraphic purposes can be coated either before or after it is suspended to the posts.

By frequent painting or coating of the telegraphic wires by the aid of my apparatus they can at a small expense be preserved for a great length of time.

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

The construction of an apparatus for aiding in the painting or coating of telegraph wires (or for other purposes) by the combination of rotating and stationary brushes, and suspension-pulleys, or their equivalents, with a portable receptacle for paint or other coating matter, substantially in the manner herein set forth, not intending by this claim to limit myself to the particular form, number, and arrangement of the parts composing the apparatus for aiding in the painting or coating of telegraph-wires, as herein represented and described, but to vary the same as I may deem expedient, while I attain the same end by means substantially the same.

BENJAMIN H. GREEN.

Witnesses:
Z. C. ROBBINS,
LEWIS W. COLVER.