A. C. KENDEL.

Machine for Making Wreaths.

No. 215,465. Patented May 20, 1879.

Fig. 1.

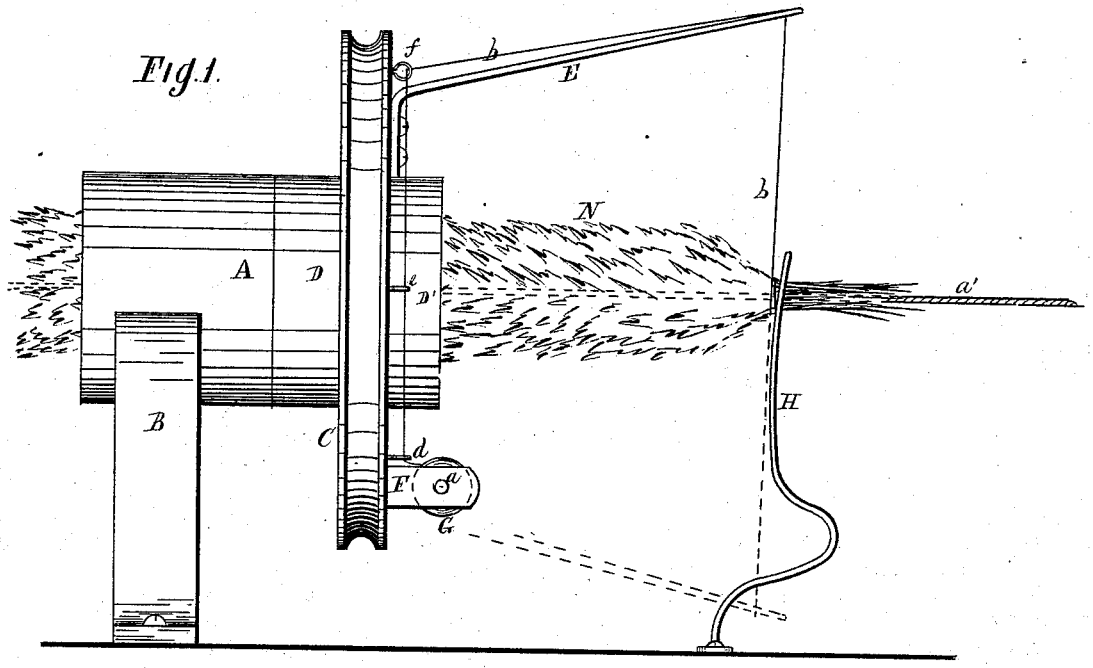


Fig. 2.

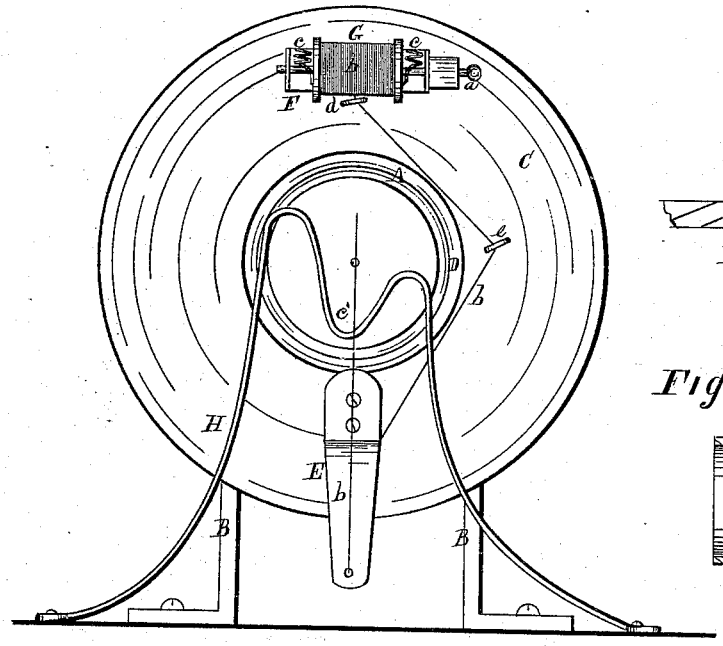


Fig. 3.

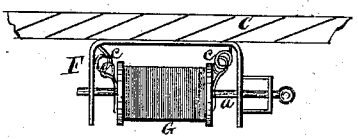
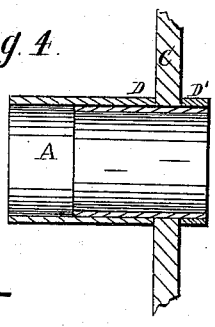


Fig. 4.



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UNITED STATES PATENT OFFICE.

ADOLPHUS C. KENDEL, OF CLEVELAND, OHIO.

IMPROVEMENT IN MACHINES FOR MAKING WREATHS.

Specification forming part of Letters Patent No. **215,465**, dated May 20, 1879; application filed February 20, 1879.

To all whom it may concern:

Be it known that I, ADOLPHUS C. KENDEL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Machine for Making Wreaths, &c.; and I hereby declare that the following is a full, clear, and complete description thereof.

The object of this invention is the making of evergreen wreaths for festoons, ornamental designs, &c., for decorative purposes.

The construction and operation of the machine are fully described in the following specification, and illustrated by the accompanying drawings, constituting a part of the same, in which—

Figure 1 represents a side view of the wreathing-machine. Fig. 2 is a front view of the same. Fig. 3 is a detached section. Fig. 4 is a transverse section of the wheel and tube.

Like letters of reference refer to like parts in the several views.

A hollow cylinder or pipe, A, is supported at one end in a horizontal position by a standard, B, firmly secured to a table or bench. To the unsupported or front end of the cylinder is fitted, so as to revolve thereon, a wheel, C, provided with a peripheral groove, to accommodate a band for driving the wheel. The wheel is kept in position on the one side by a shoulder, D, Fig. 4, formed on the cylinder, and by a collar, D′, fitted to the cylinder on the other, so that between the shoulder and the collar the wheel revolves upon the cylinder, for a purpose presently shown.

The bore of the cylinder is sufficiently large to admit the passage through it of a train or rope of wreath.

To the face of the wheel is fixed an arm, E, projecting therefrom slightly upward, as seen in Fig. 1. Opposite the arm alluded to is secured to the face of the wheel a bracket, F, in which is placed a spool, G, on a pin or shaft, *a*, inserted in the arms of the bracket, so that the spool may revolve thereon for unwinding the thread or twine *b* therefrom. That the twine may not unwind too easily, there is placed at each end of the spool a tension-spring, *c*, which, by their pressure upon the ends of the spool, regulate the tension of the twine, keeping it taut while being used, as presently shown.

Standing in front of the wheel is a standard or rest, H, consisting of a wire frame having a depression, *c′*, through which the axial line of the wheel passes. The thread or twine *b*, above referred to, passes from the spool through the guiding ring or eye *d*, thence through the eye *e* to the eye *f*, thence along the arm E to the end thereof, through which it passes down to the cord *a′*, substantially as shown in the drawings.

As above said, this machine is for making ropes or trains of evergreen, termed "wreaths," for festoons and ornamental devices for decorative purposes. To this end a cord or wire, *a′*, is reeled from a spool or reel, and passed through the depression *c′* of the rest H, thence to and through the cylinder A to a sheave or pulley, over which it depends, and is kept taut either by a weight attached to it or otherwise, by which means the cord, at the same time, is drawn from the reel as fast as it may be needed. A cord thus extended through the rest and cylinder is indicated by the line *a′*, above referred to.

The material used for making wreaths may be twigs of ordinary evergreens. It is preferred, however, to use the evergreen-plant commonly called "ground-pine," which has a growth of a few inches in length only, and therefore is well adapted for the purpose of wreathing.

The operator takes a single twig or spray of evergreen at a time and lays it lengthwise upon the cord, in the depression *c′* of the rest H, with the plumed end toward the wheel. The sides of the depression serve to hold and compress the twigs or plants close about the cord. During the time of placing the twigs upon the cord the wheel makes a revolution, carrying the arm E around the cord on which the twigs are placed. The thread or twine *b* (having been made fast to the cord and sufficient binding tension given to it) is, by the revolution of the arm around the cord, wound tightly around the twigs just back of the plume or spray, thereby binding it securely to the cord—that is to say, the stem parts of the twigs

are bound to the cord, leaving the plumed ends free and loosely covering the cord with their green sprays, as seen at N in Fig. 1.

During each revolution of the wheel and arm sufficient time is given to allow a sprig of evergreen to be laid upon the cord, (in the depression c',) which is bound to it by the twine b. The cord, with the evergreens bound to it, is drawn forward through the cylinder by a weight attached to the cord, as above stated.

If the train of evergreens be of considerable length, it can be carried up over a pulley and allowed to descend to the floor; or it can be wound on a reel adapted to receive it as fast as it is made. The forward movement of the wreath through the cylinder is only so fast as to allow ample time to adjust the twigs to the cord, to form a full and properly-rounded wreath, the winding being done close to the rest H around the stems, just back of the plume or spray of the sprigs, which are loose and free around the cord.

The rotative movement of the wheel may be so timed as to allow more than one twig or plant to be laid upon the cord before the arm comes around for binding them thereto, which, for heavy or thick wreaths, is desirable.

In the above description of the operation of the machine the twigs are shown as bound to a cord or wire. However, a slender rod may be used instead of a cord. A cord, &c., is only used when the wreaths are required to be of unusual strength. For ordinary wreaths no central cord is needed upon which to bind the twigs, said twigs being simply laid, one upon the other, in the depression c' and bound together by their stems, which are sufficiently strong for the purpose of sustaining their weight in an ordinary wreath. By this means a continuous coil of wreath of greater or less length is automatically made.

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

1. In machines for making wreaths for festoons and ornamental devices for decorative purposes, the hollow cylinder or tube A and a revolving wheel provided with a projecting arm for carrying the thread or twine from a spool attached to said wheel, combined and arranged to operate substantially as described, and for the purpose specified.

2. In a machine for making wreaths, the wheel C and hollow cylinder, in combination with the rest H, substantially as and for the purpose described.

3. In combination with the revolving wheel, a bracket and spool, G, for holding the binding-twine and tension-springs, when combined and arranged substantially as described.

4. In a machine for making wreaths, the hollow cylinder A, wheel C, arm, bracket, tension-springs, and twine-holding spool and rest, constructed and arranged to operate conjointly, substantially as described, and for the purpose specified.

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