

E. HENDSCHUCH.
 APPARATUS FOR THE MANUFACTURE OF ARTIFICIAL FLOWERS AND FOLIAGE.
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1,049,857.

Patented Jan. 7, 1913.

Fig. 1.

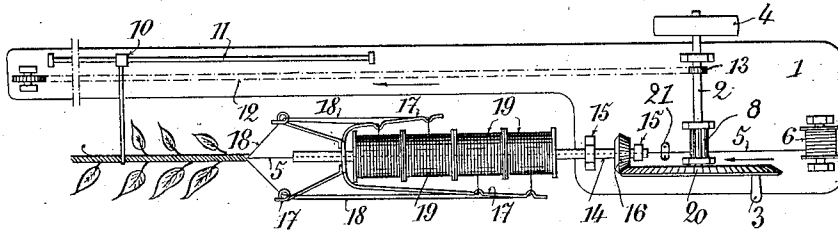


Fig. 2.

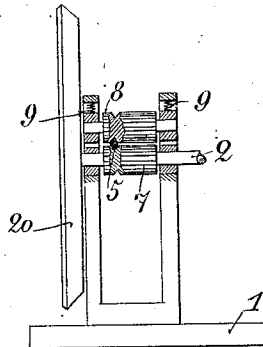


Fig. 3.

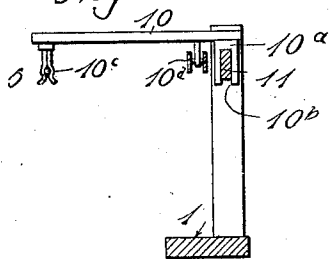
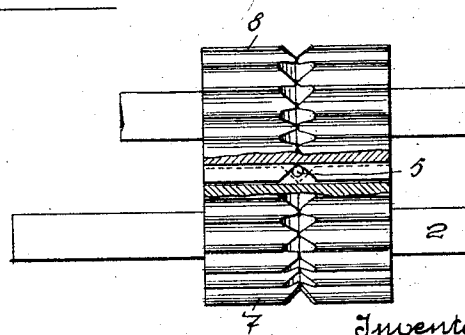


Fig. 4.



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EUGÈNE HENDSCHUCH, OF PARIS, FRANCE.

APPARATUS FOR THE MANUFACTURE OF ARTIFICIAL FLOWERS AND FOLIAGE.

1,049,857.

Specification of Letters Patent.

Patented Jan. 7, 1913.

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To all whom it may concern:

Be it known that I, EUGÈNE HENDSCHUCH, German subject, residing at 4 Quai des Celestins, Paris, in the Republic of France, manufacturer, have invented certain new and useful Improvements in Apparatus for the Manufacture of Artificial Flowers and Foliage, of which the following is a specification.

This invention relates to an apparatus for the manufacture of artificial flowers and foliage.

Heretofore, the stalks or stems, the branches, the leaves, etc., of the flowers, have been assembled by winding by hand around the said stems threads or strips which are generally colored in order to imitate the natural stems.

This invention has for object to effect mechanically such winding operation in a quicker and more regular manner than by hand.

The apparatus comprises a hollow spindle within which passes freely the wire forming the core of the main stem of the branch or of the wreath to be manufactured and on the said spindle are mounted reels filled with threads or strips and also guides for the same which, by revolving cause the said threads or strips to be wound around the wire issuing from the spindle. The forward movement of the said thread may be produced mechanically and in such a manner as to be proportionate to the winding movement.

One embodiment of this invention is shown in the following drawing, in which:

Figure 1 is a plan view, and Fig. 2 is an elevation of the fluted rollers and gear wheel which actuates them, with the roller bearing shown in section. Fig. 3 is a transverse section of the machine; Fig. 4 is a sectional elevation.

On the main frame 1 is mounted a shaft 2 which may be driven by hand by means of a crank-handle 3, or by an engine by means of a belt pulley 4, or in any other suitable manner. The said shaft actuates two feed devices for moving forward the wire 5, which is to constitute the core of the stem or of the wreath to be manufactured and which comes from the reel 6.

One of the feed devices is used when the wires 5 have a certain amount of rigidity, and consists of a pair of fluted rollers 7 and 8 one of which is fixed to the shaft 2 and the

other loosely mounted in bearings pressed by springs 9 in such a manner as to clamp the wire 5 which passes between the circular grooves provided in the said pair of rollers, and to cause it to advance in the direction of the arrow.

The carrying forward of the wire through the channel formed by the circular grooves is made quite sure as the walls of such grooves are slotted by the flutings of the rollers and thus present ridges which bear on all the sides of the wire.

The other feed device is used when the wire 5 is soft; it comprises a slide 10 guided if required by a rod 11 or a slideway and an endless chain 12 actuated by a sprocket-wheel 13 on the shaft 2. The said slide comprises a clip or a hook to grasp the wire 5, and may be clutched, by means of a pin, a hook, or the like, with the corresponding member of the links of the chain moving in the direction of the arrow so as to suitably pull the wire; it will be obvious that with such a device it will be necessary to put the slide out of gear and to detach the same from the wire 5 when it reaches the return point of the chain, for the purpose of bringing it back and of attaching it to a fresh point of the wire. But it must be understood that this device, shown by way of example, may be replaced by any other suitable means for carrying the wire forward, whether such means has an intermittent or a continuous movement.

The apparatus comprises essentially a hollow spindle 14 revolving in the bearings 15 and within which the wire 5, passes freely. The said spindle receives a rapid rotatory motion from a toothed wheel 20 affixed to the shaft 2, through the medium of a pinion 16 affixed to the end of the said spindle. On the latter are affixed several guides 17 for the threads or strips 18 which unwind from reels 19 loosely mounted on the spindle. The said guides cause the threads 18 to wind in close spirals around the wire 5 and the stems of the leaves or flowers which are placed by hand along the wire 5.

The guides 17 are arranged regularly around the spindle so that the pull on the threads 18 is equal and does not tend to deflect the wire 5. If desired, the latter may be guided adjacent to the point where the threads 18 are being wound on by means of a suitable guide fixed to the main frame of the apparatus.

In order to cause the threads 18 to adhere to the wire 5, the apparatus may be provided with a device for properly coating the wire 5 with some agglutinous matter, for instance a sponge soaked with gum and located either at the inlet or at the outlet of the spindle 14.

As will be understood, the above described construction, arrangement, and parts may be varied or replaced by equivalents without departing from this invention as defined in the appended claims.

The manner in which the leaves are inserted is very simple, it being necessary only to locate the stem thereof along the wire 5 at the point where the wires 18 are wound around so that the latter so surround both the stem and the wire in connecting the same together.

The slide 10 as shown in Fig. 3 carries at one end a head 10^a having a slot 10^b to slide along the flat rod 11, and at the other end a bifurcated rod or clip 10^c adapted to hold yieldingly the wire 5, and between its ends a pin 10^d adapted to engage the links of the chain 12. In order to put out of gear, all that need be done is to lift the slide so as to disconnect the pin 10^d from the chain.

Claims—

1. In a machine for the manufacture of

garlands of foliage of the kind specified, the combination of a hollow shaft, means for feeding a wire through said shaft, means for winding threads around said wire, an endless chain located on one side of the path of said wire at its issue from the shaft and at a suitable distance in front of the chain, a fixed rod parallel to said chain, a slide sliding on said rod and means for placing said slide in gear with the chain for holding said wire.

2. In a machine for the manufacture of garlands of foliage of the kind specified, the combination of a hollow shaft, a pair of spring pressed rollers adapted to press a wire through said shaft, each of said rollers having longitudinal flutings and a circular groove which intersect one another, the two grooves forming a channel having indented walls to hurry forward the wire which passes therein, and means for turning said rollers.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

EUGÈNE HENDSCHUCH.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."