

(No Model.)

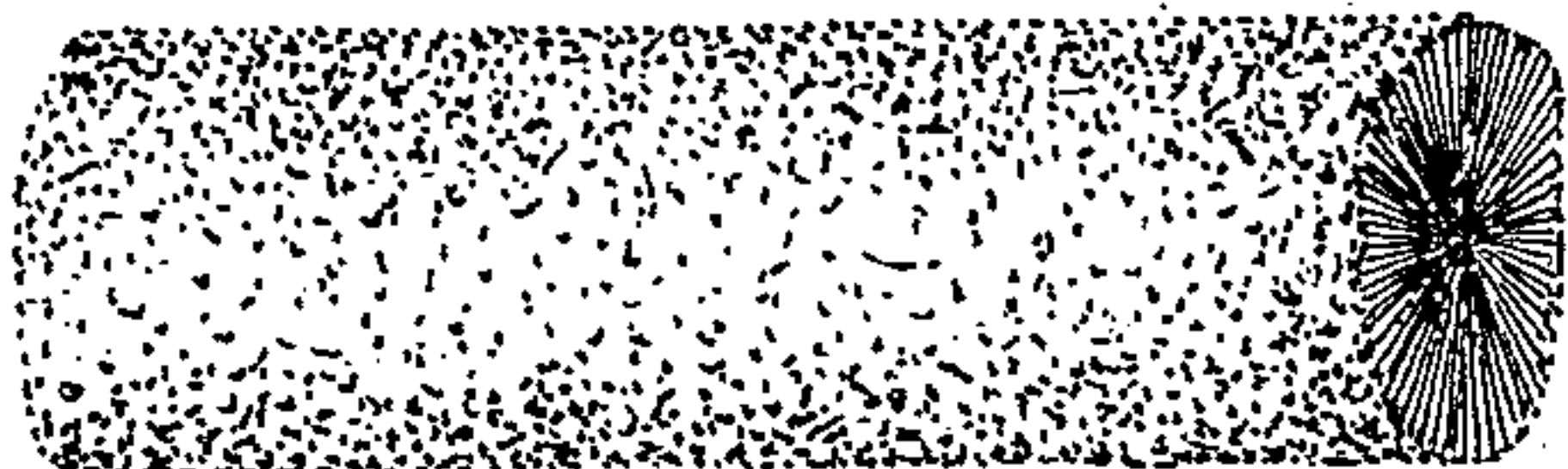
A. HECK.

ARTIFICIAL FLOWER.

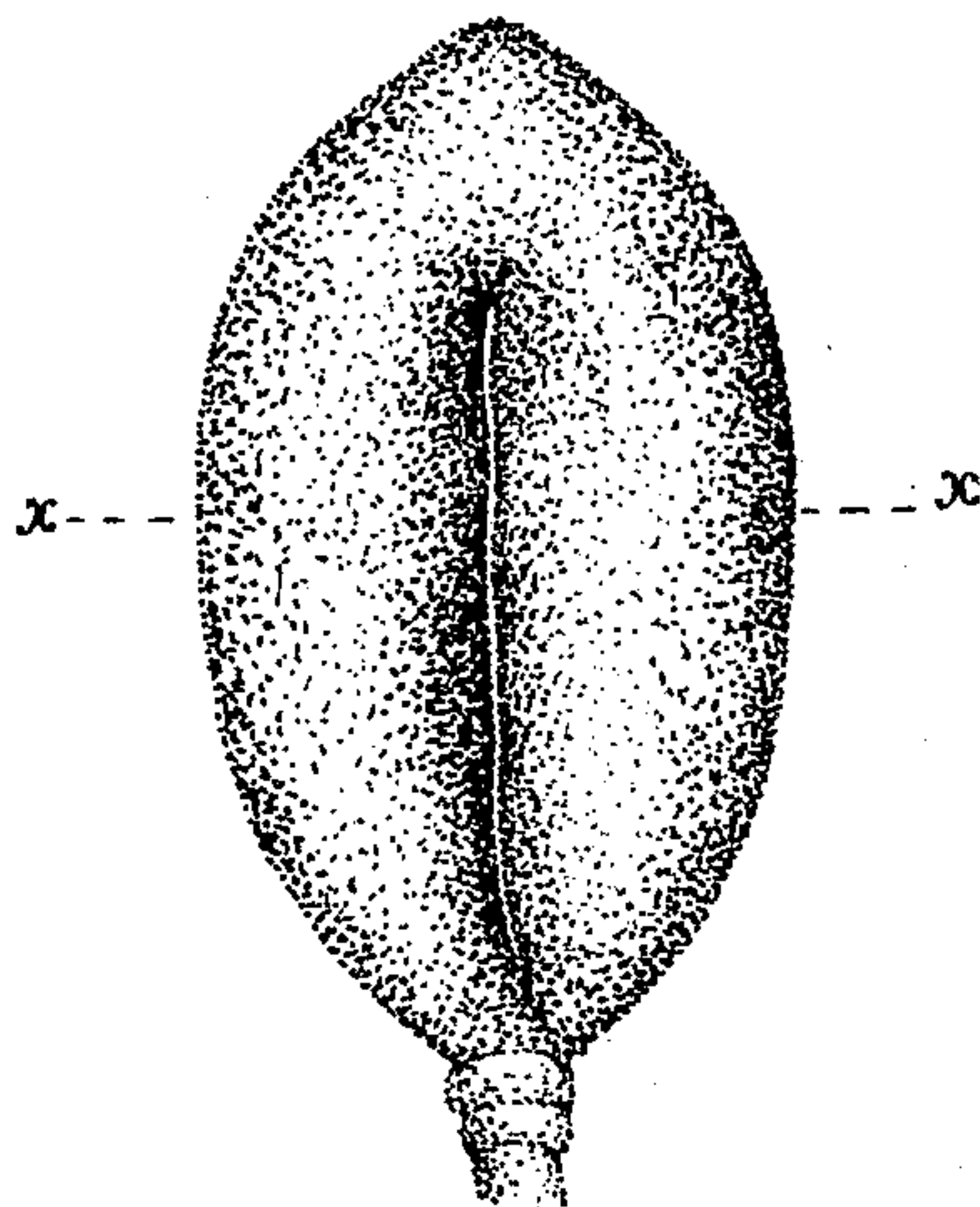
No. 370,140.

Patented Sept. 20, 1887.

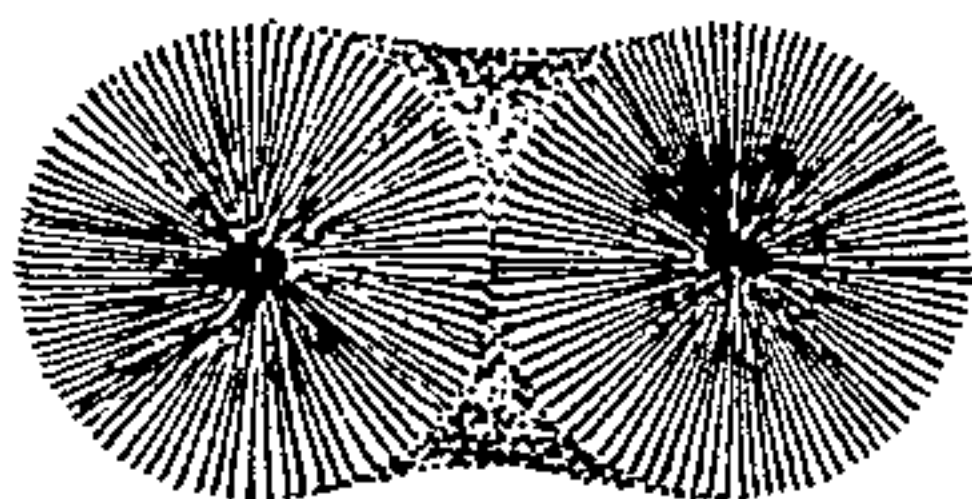
*Fig. 1.*



*Fig. 2.*



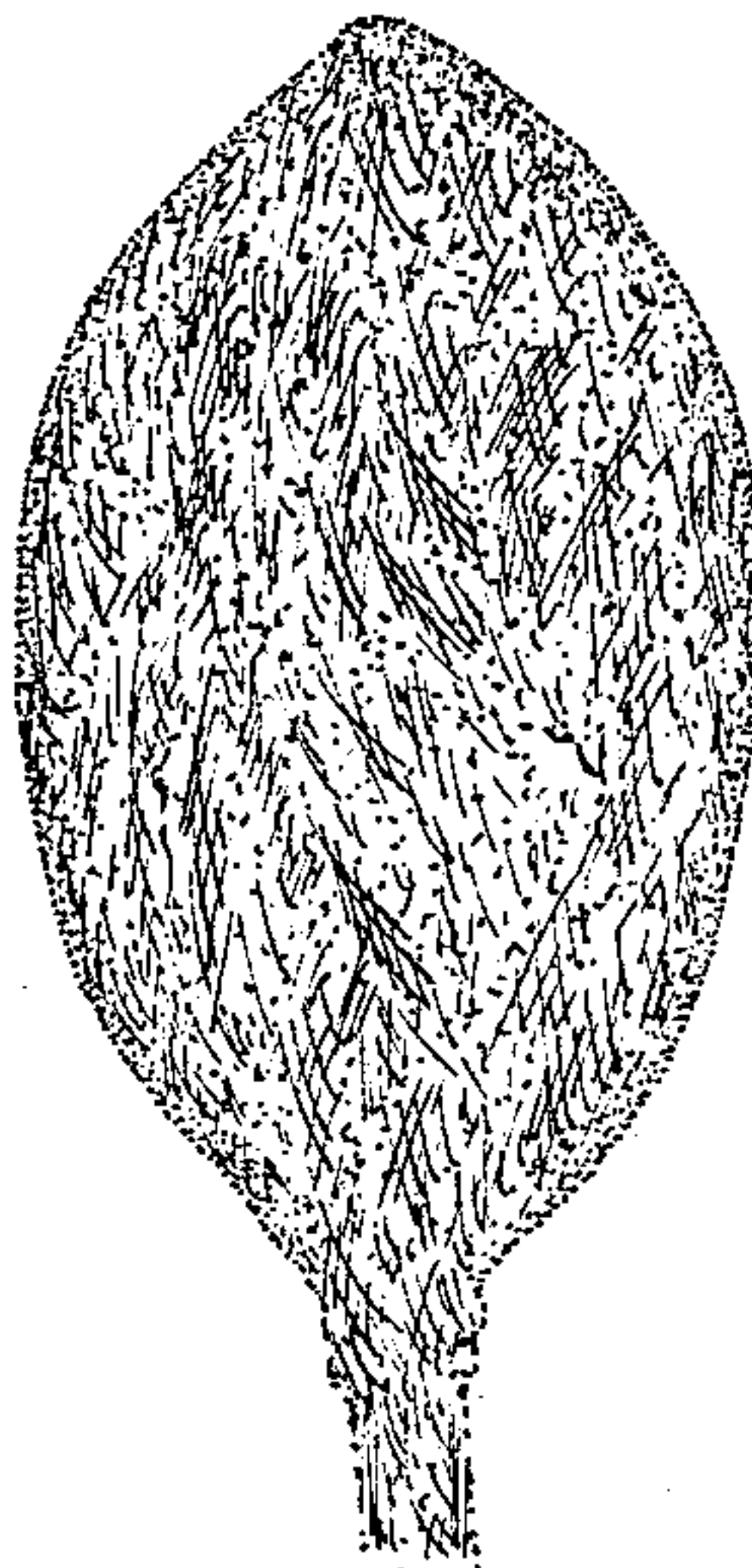
*Fig. 3.*



*Fig. 5.*



*Fig. 4.*



*Witnesses*  
*James D. Greenwood*  
*Maurice J. Roach*

*Inventor*  
*August Heck*  
*By his attorneys*  
*Gifford & Brown*



# UNITED STATES PATENT OFFICE.

AUGUST HECK, OF NEW YORK, N. Y.

## ARTIFICIAL FLOWER.

SPECIFICATION forming part of Letters Patent No. 370,140, dated September 20, 1887.

Application filed June 21, 1887. Serial No. 242,053. (No specimens.)

*To all whom it may concern:*

Be it known that I, AUGUST HECK, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Methods of Making Artificial Flowers and Similar Articles, of which the following is a specification.

Heretofore in the manufacture of a certain kind of artificial flowers and other objects chenille has been employed. The chenille is bent into the required shapes to form the desired objects, and when so bent is secured in form, usually by winding or tying. Various objects—such, for instance, as leaves, flowers, &c.—are often combined together by winding, so as to form a branch or spray of flowers and leaves. Many objections exist to this class of articles as previously formed out of chenille, prominent among which are that, owing to the nature of the chenille, it being cylindrical and having a heavy pile entirely around it, artificial objects made from it can and do only approximate in a limited degree to the appearance of the natural object they are intended to simulate. Again, it is difficult to attach them to a support—as, for instance, a piece of textile material—as they cannot be made to lie flat against the surface of such material. Furthermore, they are easily bent out of shape, and when so bent the shape is not easily restored. Again, the pile of the chenille is not easily trimmed even.

It is the object of my improvement to make artificial flowers, leaves, and other objects from chenille which shall obviate the objections to such articles made from that material by the methods heretofore practiced. The chenille which I employ is an article of commerce.

In the accompanying drawings, Figure 1 is a side view of an ordinary piece of chenille. Fig. 2 is a view of the same bent into the form of a leaf. Fig. 3 is a cross-section of Fig. 2, taken at the line  $x x$ . Fig. 4 is a face view of such a leaf after having been subjected to the first step in my process. Fig. 5 is an edge view of the leaf shown in Fig. 4.

Similar letters of reference designate like parts in the figures.

In carrying out my process I first take chenille and loop or bend it into the form required—as, for instance, the form illustrated

in Fig. 2. Any desired number of such forms are now placed upon a flat support, which may be a table. Preferably the table will be covered with a dry piece of muslin or other textile material. After having been so placed, the objects are dampened with water. As the objects are of various colors, I prefer that the water shall contain some substance in solution which will tend to prevent the water from injuring the colors, or, in other words, shall act as a mordant. I have found common salt to answer this purpose very well. I also mix with the water a slight quantity of adhesive material—as, for instance, egg-albumen—varying in amount according to the quantity of water used. The objects having been well dampened, I place over them a damp cloth, preferably dampened with hot water, after which I iron the cloth above the objects with a hot flat-iron, or even a hot roller may be used. I so continue to iron the cloth until the same is approximately dry. Upon removing the cloth the objects will be found to be approximately flat and to have approximately parallel sides, or to be in the condition shown in Figs. 4 and 5. The adhesive material in the water with which the objects were dampened, having dried with the water, causes the filaments of the pile of the chenille to adhere quite firmly together. The objects may now be readily trimmed at their edges, if required, to any desired shape.

It will be observed by an examination of Figs. 2 and 3 that there is a distinct line of demarkation between the two portions of chenille when they are brought together. The two portions are not secured together, and frequently in handling are pulled apart, leaving a space between them. When the objects have been subjected to the first step in my process, as above detailed, the pile of the portions of chenille which have been brought together so overlap and become united as to practically conceal the point of coming together, and also to resist considerable lateral strain. If, however, it is desired to secure the portions still more firmly together and render them additionally stiff, I apply varnish to the surface of the object, preferably on one side only, and only at or near the place where the two portions come together, as described. I have found it advantageous to use what is known



as "French" varnish diluted with alcohol until quite thin. It may be applied with a brush; but, preferably, it will be applied with an atomizer. Not only does this strengthen the article, but the varnish improves the luster of the silk of which the chenille is composed and adds materially to the appearance of the finished article. The application of the varnish, when such is used, as well as the application of the adhesive material, as detailed above, tends to make one side of the article impervious to moisture. This is of great advantage, for the reason that any adhesive material in a liquid state may then be applied to the other or what would in practice be the back side, and the article may be pasted onto a flat surface—as, for instance, a piece of textile fabric—without danger of the moisture appearing on the front side of the article, and thus injuring its appearance.

Some objects I desire to color—as, for instance, to give variegated tints to flowers, insects, &c. In order to do this I take dye, preferably aniline dye, of any desired color, and mix a sufficient quantity of it with French varnish suitably thinned with alcohol, or I mix it with alcohol or other suitable solvent to form the required shade. The solution I place in an atomizer, which latter may be of the ordinary or any desired construction. I then spray the article to produce the required tint. By using a number of colors and atomizers different shades or tints may be imparted to the article and very beautiful and natural effects produced. I may also apply paint to the article with a brush in the usual way when it is desired to produce certain effects.

The various objects or parts of objects may be combined together in any desired manner, or they may be combined with ordinary chenille or other material.

Articles prepared according to my process

are very flexible and yet strong, while at the same time they may be readily applied to flat surfaces and simulate very closely the natural object.

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

1. An artificial leaf or other object made of chenille bent into the form of a loop, having approximately parallel sides, and having the meeting piles of the two portions forming the loop secured together, substantially as specified.

2. The process of making an artificial leaf or other object from chenille, consisting in first bending the chenille into the required shape, then moistening it with a solution of adhesive material, and then ironing the object out approximately flat, substantially as specified.

3. The process of making an artificial leaf or other object from chenille, consisting in first bending the chenille into the required shape, then moistening it with a solution of adhesive material and a mordant, and then ironing the object out approximately flat, substantially as specified.

4. The process of making an artificial leaf or other object from chenille, consisting in first bending the chenille into the required shape, then moistening it, next ironing it out approximately flat, and subsequently applying varnish to it, substantially as specified.

5. The process of making an artificial leaf or other object from chenille, consisting in first bending the chenille into the required shape, then moistening it, next ironing it out approximately flat, and subsequently dyeing it by spraying the dye thereon, substantially as specified.

AUG. HECK.

Witnesses:

D. H. DRISCOLL,  
MAURICE J. ROACH.