

UNITED STATES PATENT OFFICE.

WARREN J. LEWIS, OF LEOMINSTER, MASSACHUSETTS, ASSIGNOR TO
VULCANITE MANUFACTURING COMPANY.

IMPROVEMENT IN THE MANUFACTURE OF BUTTONS AND OTHER ARTICLES FROM VEGETABLE
IVORY, &c.

Specification forming part of Letters Patent No. **210,617**, dated December 10, 1878; application filed
December 22, 1877.

To all whom it may concern:

Be it known that I, WARREN J. LEWIS, of Leominster, in the county of Worcester and State of Massachusetts, have invented certain Improvements in the Manufacture of Buttons and other Articles from Vegetable Ivory, of which the following is a specification:

This invention relates to the utilization of the Corosso nut, or vegetable ivory, in the manufacture of buttons and other articles; and it consists in first reducing the material to powder by some means, and then subjecting it to pressure in heated-metal molds, with or without an agglutinizing material, all as will be hereinafter set forth.

"Vegetable ivory," so called, has been used extensively in the manufacture of buttons and other articles small enough to be cut from the solid nut; but as large pieces cannot be cut from the same, it is obvious that the size of the articles produced must be very limited, and the waste is, of necessity, very great.

It is in the utilization of this waste, and its capability of producing articles of any desired magnitude and form, as well as in the rapidity of multiplication as compared with the ordinary method of manufacture, that the economy and value of my improved method of manufacture consist.

By my method the nuts, or the scraps of the same, are ground up fine, and preferably, but not necessarily, bolted like flour, to insure an approximation to palpability. If very fine it produces more compact and homogeneous wares than the coarser material, and the compactness lends strength.

If the article to be made from the nuts is intended to be white, the dark husks should

be removed before they are ground; but if they are to be colored, as they may be, this will not be absolutely necessary, but preferable. If to be colored, the pigment should be thoroughly mixed and incorporated with the powdered nut, and then the whole be subjected to heavy pressure in heated metal molds. The pressure and heat should be sufficient to thoroughly solidify the mass and render it homogeneous and compact. If desired, some agglutinizing material may be used; but usually such material is unnecessary.

After removal from the molds the articles are trimmed and finished as the circumstances of the case may require, and are then ready for sale. Such articles, not having any grain, are less liable to split than those cut from the solid material, and receive a more uniform finish.

I claim—

1. The within-described method of making articles from vegetable ivory, which consists in pulverizing the same and subjecting it to pressure in heated molds, with or without an intermixture of agglutinizing matter, substantially as set forth.

2. As improved articles of manufacture, buttons or other articles formed by subjecting pulverized vegetable ivory to pressure in heated molds, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WARREN J. LEWIS.

Witnesses:

H. MAY,
JAMES BENNETT.