

UNITED STATES PATENT OFFICE.

JONATHAN BLISS, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF
HIS RIGHT TO GEO. L. WINN, OF SAME PLACE.

IMPROVEMENT IN THE TREATMENT OF ALBUMEN FOR THE PRODUCTION OF MOLDED ARTICLES.

Specification forming part of Letters Patent No. **213,733**, dated April 1, 1879; application filed
July 8, 1878.

To all whom it may concern:

Be it known that I, JONATHAN BLISS, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in the Use and Adaptation of Albumen, vegetable or animal, for the production from it of articles of ornament, usefulness, or amusement, which improvement is fully set forth in the following specification.

The object of my invention is to utilize albumen for the purposes specified, and by solidifying it in molds or dies to give it the shape or form of any article I may wish to produce.

To make use of albumen for the purposes named, I first dry it perfectly dry and hard. I then reduce it, by grinding or pounding, to a fine powder, which powder I sift through a fine sieve to give uniformity of fineness. I then take this fine powdered albumen and put it into molds or dies which are polished brightly, and formed to give the article to be produced the shape I may require. I then place the molds or dies in a heated press and subject them to a quick and severe pressure, which drives the followers of the dies or molds down on the fine powdered stock, forcing it into the molds, and, in connection with the heat transmitted through it from the heated press, forms it into a compact and solid body having the form or shape of the molds or dies into which it has been pressed.

The length of time which I require in treating albumen as described varies, according to the character of the articles to be produced. Small ornaments require from one to five minutes. Articles of larger bulk require sometimes as much as fifteen minutes; but I would not wish to restrict myself to any length of time.

After the article has been taken from the dies or molds, it may be readily polished on cotton or chamois wheels, with the use of crocus or rotten-stone and oil, after the manner employed in polishing jewelry.

The albumen, when pressed without coloring, is of a pale yellowish white or amber shade; but I produce any color I may wish by coloring the fine powdered stock and pressing afterward.

The amount of pressure and degree of heat required in this treatment of albumen varies, according as the article to be produced may be thick or thin, or as additional strength and density may be required. For ordinary jewelry ornaments, checkers, buttons, &c., I have found that a pressure of from five hundred to one thousand pounds to the square inch, and heat from 150° to 250° Fahrenheit, gives very satisfactory results. Articles of larger bulk and greater density require more pressure with about the same degree of heat to give them the requisite strength and solidity, and also to thoroughly preserve them; but I would not desire or wish to be restricted in the use of any amount of pressure or any degree of heat which I may require in the utilization of albumen for the uses and purposes above described.

What I claim as my invention is—

The treatment of vegetable or animal albumen hereinbefore described, by drying, pulverizing, and sifting it preparatory to pressing the same in heated molds or dies, for the uses and purposes above named.

JONATHAN BLISS. [L. S.]

Witnesses:

G. M. OLMSTEAD,
JASPER A. CADMUS.