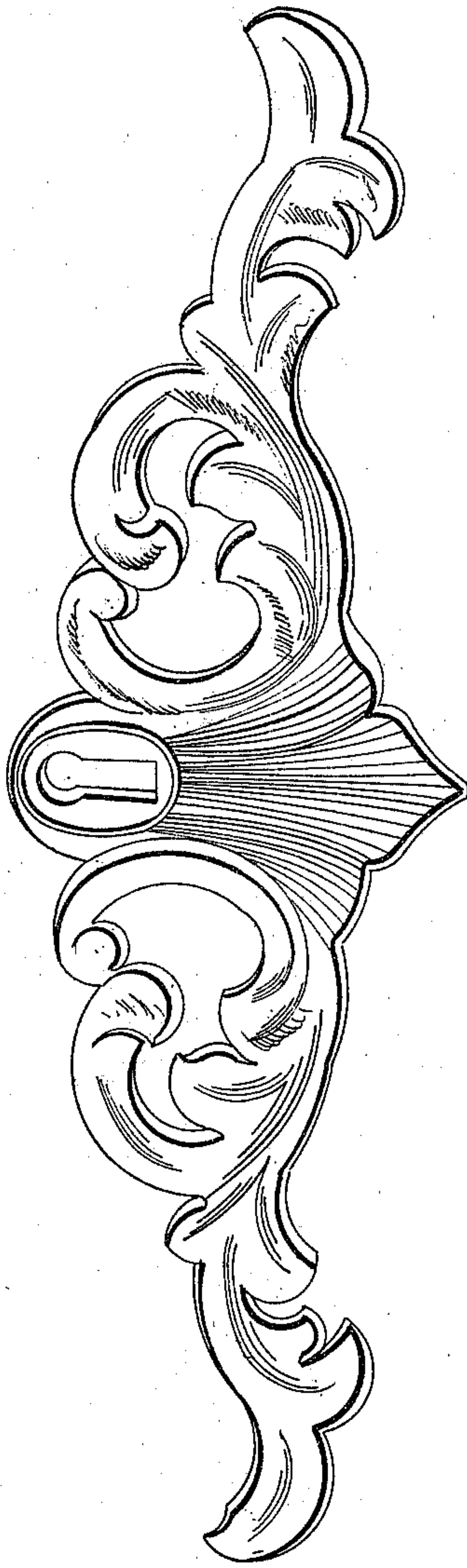


*W. Hopp.*

*Wood Carving.*

*Nº 90,006.*

*Patented May 11, 1869.*



*Witnesses:*

*Jacob Kruger Sen  
H. Egelhoff*

*Inventor:*

*Wm. Hopp*



# UNITED STATES PATENT OFFICE.

WILLIAM KOPP, OF LOUISVILLE, KENTUCKY.

## METHOD OF PREPARING AND EMBOSSING WOOD.

Specification forming part of Letters Patent No. 90,006, dated May 11, 1869.

*To all whom it may concern:*

Be it known that I, WILLIAM KOPP, of Louisville, county of Jefferson, and State of Kentucky, have invented a new and useful Method of Preparing and Pressing Wood, designed in many cases to form a substitute for carved work on furniture and the like; and I do hereby declare that the following is a full and exact description thereof.

The nature of this invention consists in preparing and pressing this article, but not in the form of the press, as the pressure can be accomplished by either lever, screw, or hydraulic, if only powerful enough.

These articles can be made of most sorts of wood, but the preparation and art of pressing presents the novelty of my invention; and in order to enable others to make and use my invention, I will proceed to describe the method of its preparation and system of pressing.

I prepare the wood to receive the pressure of flowers or ornaments on one side by making it wet and hot; then I rub it with wax, to make it tough and supple, that it does not break or stick to the stamps; then I paste or glue to the back side of the wood—that is, the plain side, where no impression comes—a pasteboard or thicknesses of paper, to make one-quarter of the whole thickness, so that the wood is in the proportion of three of wood to one of paper in thickness.

The paste or glue to glue this paper on is made of flour, alum, and water; and when I commence pressing, the bed, or pressing-plate, where this article is pressed on, as well as the stamp itself, is made very hot, which heat, with the chemical quality of the glue and pasteboard, causes the pasteboard and glue to dissolve, or form a sort of a hard, tough pap, and thereby fill out the elevated vacancies in the finished article, caused by the wood retaining its original thickness, so that, when finished pressing, this pap will be considerably thicker where the designs are more elevated than where they are depressed. Those dies have sharp edges outside, and I press these articles on a sheet of plastic pasteboard laid on the pressing-block, and exert such a pressure that the sharp outside edge of the die

presses the article and cuts off its outside edges at the same time; and when pressed it can be immediately removed from the press, as, through the chemical quality of glue and pasteboard, with the great pressure and great heat, it becomes hard and dry, and ready for use as soon as pressed.

The preparation of the wood with wax serves a double purpose and produces two distinct effects: First, it renders the wood pliable, soft, and plastic, preventing the fibers from breaking when the wood is pressed; and, secondly, permeating the wood when rubbed in and under the press, it not only helps to keep the pressed form in its shape, but gives it a peculiar luster, similar to that of old mahogany-wood which has from time to time been rubbed over with wax, and after a while has attained the luster peculiar to such wood.

Instead of using one raised and one sunk die, I use a sunk one and a flat one. The edges of the sunk die being made sharp, it cuts the wood and pasteboard as the latter is pressed into it, while the flat die enables me to form the back of the pressed wood flat, so as to be ready to be glued onto any desired outside of wood-work in the same operation.

As the sharp-edged dies cut the pasteboard, those parts of the latter which cover the places in the wood which, by pressing, become raised, this pasteboard, mixing, under a high pressure of the other, or flat die, with the glue, forms a sort of pulp with the latter, which pulp at once hardens and dries, and so fills the cavities on the reverse side of the pressed wood that the same retains its shape at once, without the necessity of drying it gradually, as is now generally the case.

I do not claim, broadly, pressing wood into certain shapes or forms, nor the treatment of the same with any article whatever, as I am well aware that such has been done and used before; but

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

1. The method of pressing wood into certain shapes and forms by pressing it with one sharp-edged sunk and one flat die, the former of which cuts the pasteboard, while the latter forces it into the cavities on the reverse side

of the pressed wood, substantially as and for the purposes set forth.

2. The method of gluing pasteboard on the reverse side of wood to be pressed with such glue composition that the pasteboard and glue, when heated, cut, and pressed, will combine to form a pulp, which fills the cavities on the

reverse side of the pressed wood, and dries during the operation, substantially as and for the purposes set forth.

WILL. KOPP.

Witnesses:

MATTHEW FLETCHER,  
A. W. WALLER.