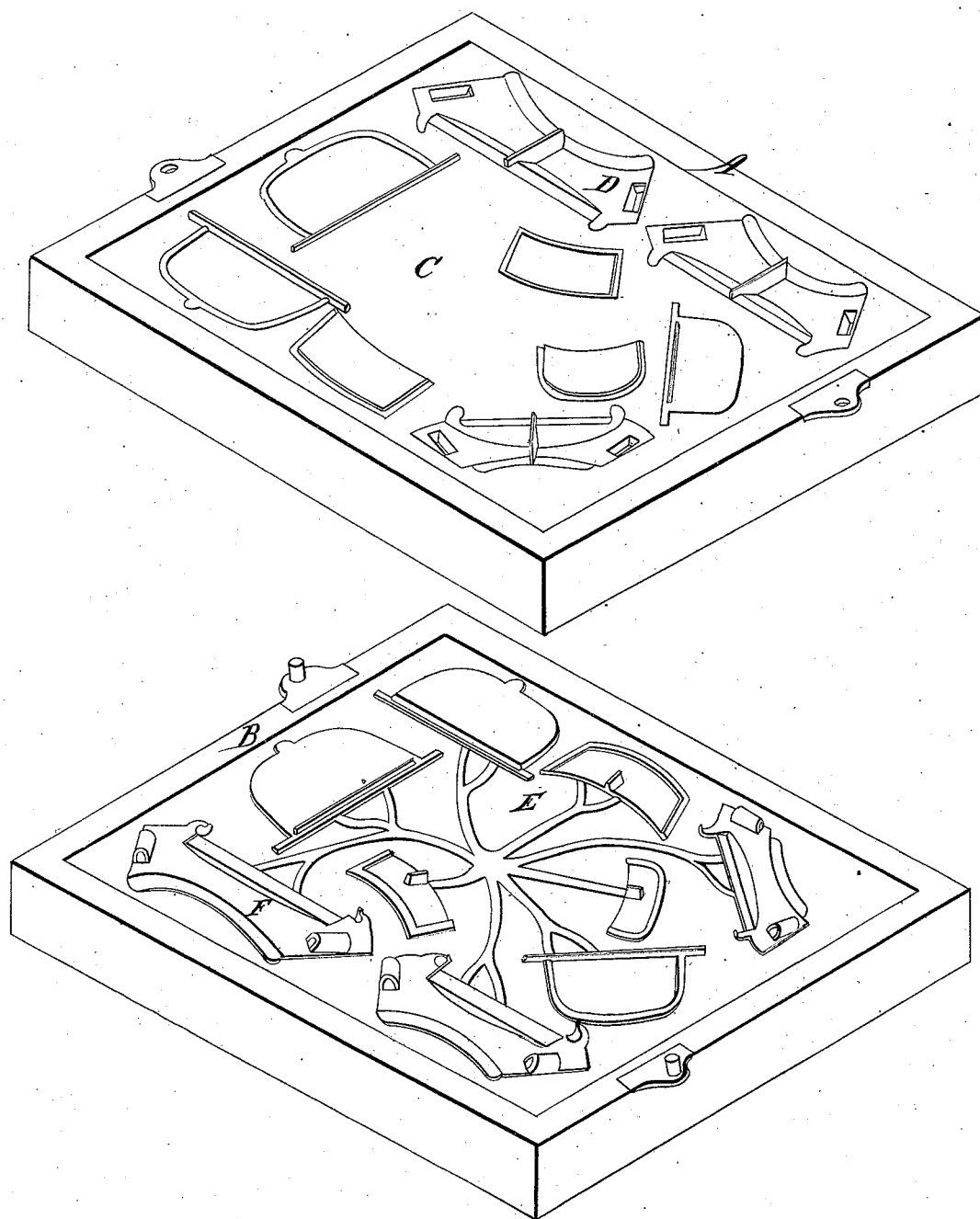


F. N. Still,
Pattern for Castings.
No. 4,803. Patented Oct. 7, 1846.



UNITED STATES PATENT OFFICE.

FRANCIS N. STILL, OF BUFFALO, NEW YORK.

IMPROVEMENT IN MAKING MOLDS FOR CASTINGS.

Specification forming part of Letters Patent No. 4,803, dated October 7, 1846.

To all whom it may concern:

Be it known that I, FRANCIS N. STILL, of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Method of Molding for Castings; and I hereby declare that the following is a full and exact description.

The nature of my invention consists in using two patterns for one casting, and having those patterns placed with the reverse sides up, and made stationary in two separate flasks filled with plaster-of-paris. My object in using two patterns is that I may mold from concave and convex patterns, such as cannot be divided or molded from a plate. My object in using the two flasks of plaster-of-paris is that I may get two concave and convex surfaces to fit each other perfectly, and at the same time fit the particular shape of the patterns, so that when a flask of sand is filled upon each of them, taken off, and closed together, it will form a perfect mold from said patterns.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The two frames A and B in the accompanying drawings, are intended to represent two separate flasks, which are made to fit each other perfectly. I then fill the flask A with a putty made of plaster-of-paris, as is seen at C, and place in one or more patterns, as I think it most convenient, with a part of the pattern raised above the putty, as is seen at D. After the putty becomes set and hard, I put on a coat of oil to prevent the green putty from

sticking to it. I then take the flask B, place it upon the flask A, and fill it with a green putty, press it down and let it remain until it becomes set and hard. I then take it off, having a perfect fit of the two flasks of plaster-of-paris, as is seen at C and E, and also an impression of the pattern D. I then take my second pattern and place it in the impression taken from the pattern D, as is seen at f. This done, my patterns are complete and ready for use. I now use the two flasks containing the plaster-of-paris and patterns as a stationary die, upon which I strike the molds in sand for castings. For example, I take a set of flasks, as is common in molding, and fit them to the flasks A and B, fill them with sand, take them off, close them together, and this forms a perfect mold of the patterns contained in the two flasks of plaster-of-paris.

I do not claim molding from plain patterns, such as can be divided and molded from each half, nor from such as can be molded in connection with a plate.

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

Making the second pattern or patterns by taking an impression of the first upon plaster-of-paris or other similar substance, and placing duplicate patterns in the cavities made by the patterns of the first, substantially as herein described.

FRANCIS N. STILL.

Witnesses:

J. M. THAYER,
Z. C. ROBBINS.