De W. C. FARRINGTON.

DIES FOR PRESS DYEING.

No. 182,752. Patented Oct. 3, 1876.

Fig 1

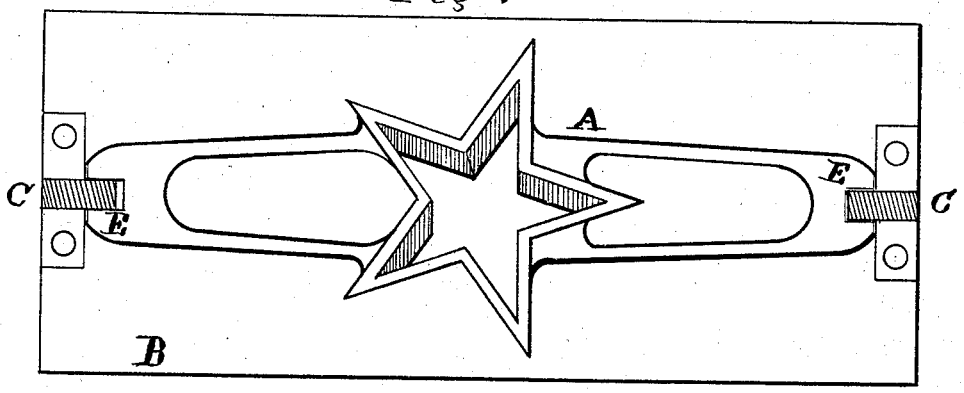


Fig 2

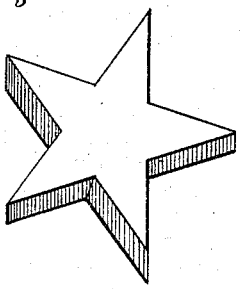
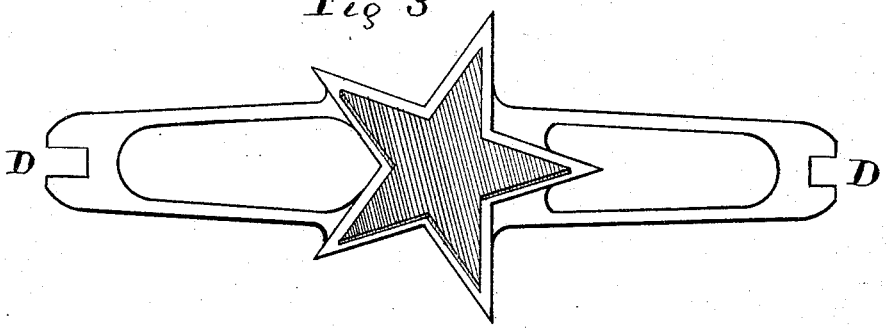


Fig 3



Witnesses
George Lee
C. S. Livingston

De Witt C. Farrington.
per R. D. Williams
Atty.

UNITED STATES PATENT OFFICE.

DE WITT C. FARRINGTON, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN DIES FOR PRESS-DYEING.

Specification forming part of Letters Patent No. **182,752**, dated October 3, 1876; application filed May 22, 1876.

To all whom it may concern:

Be it known that I, DE WITT C. FARRINGTON, of the city of Lowell, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Dies or Objects for Press-Dyeing, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

My present invention is an improvement upon my patent of March 12, 1872, No. 124,428; and it consists in the combination of the usual frame and dye-vat with a metallic die-holder, into which a die of wood or other substance is secured, the object being to firmly hold the die in position, and protect it from injury, and allow it to be readily removed and another inserted in its place.

This die-holder, being made in skeleton form, allows a free circulation of the dye, and is so shaped that it guides and fixes the die in position upon the bed-plate.

In the accompanying drawings, Figure 1 represents a top view of a skeleton die-holder, A, resting upon a bed-plate, B. The guides C C upon the frame fit into slots in the holder, by which it is held in position. Fig. 2 is a die in the form of a star. Fig. 3 shows a skeleton frame with a die inserted. D D are the slots which fit the guides, as shown at E E, Fig. 1.

When in use a die is laid upon the bed-plate, as shown in Fig. 1, then a piece of cloth to be dyed is placed upon the die, then another die, and so on, until several layers are thus arranged, after which the whole are firmly locked together, and immersed in the dye.

I have found by experience that some metals, which give good results in some dyes, are gradually consumed or corroded by the said dyes, and if the die and stems are of such metal it is necessary to renew them at considerable expense. Now, by the use of some material for a die-holder which is indestructible, the die may be removed and a new one inserted at much less cost. For instance, I have found by experience that tin is well adapted to the use in Prussian-blue dye, but is soon destroyed by the action of said dye. I have also found that a composition of copper and tin is nearly indestructible in the same dye.

It will now be obvious that by the use of a die-holder made from this composition, with a tin die inserted, a more economical machine or press may be made and maintained than if one metal is used for both die and holder.

In other dyes, such as "lac," for instance, wood gives good results, and by removing the tin die from the holder and inserting one of wood, the same press is made to answer a twofold purpose. In other dyes, dies of stone are often used, while the same holder answers the purpose of holding them in position.

What I claim as my invention is—

The combination, with a dye-vat and dyeing-frame, of the die-holder and removable die, substantially as described.

DE WITT C. FARRINGTON.

Witnesses:

GEORGE LEE,

C. S. LIVINGSTON.