W. KUEHN.

Manufacture of Oil-Pictures for Transferring.

No. 168,096. Patented Sept. 28. 1875.

FIG. 1.

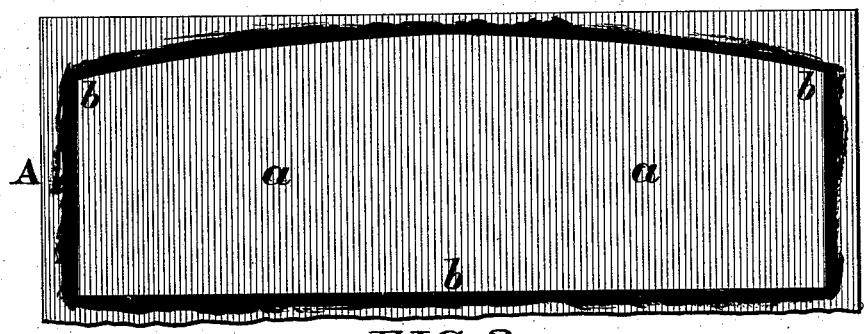

FIG. 2.

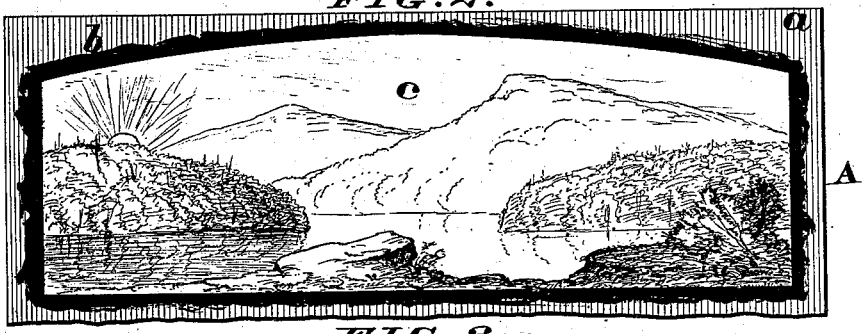

FIG. 3.

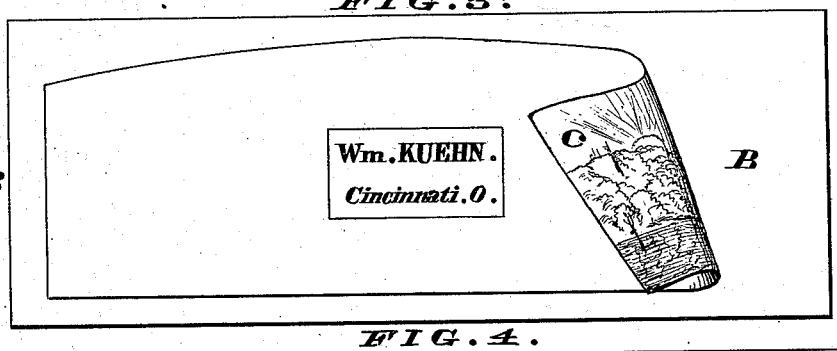

FIG. 4.

Attest.
Jas. N. Layman.
Chas. J. Booch

William Kuehn
By Knight Bros. Attys

UNITED STATES PATENT OFFICE.

WILLIAM KUEHN, OF CINCINNATI, OHIO.

IMPROVEMENT IN THE MANUFACTURE OF OIL-PICTURES FOR TRANSFERRING.

Specification forming part of Letters Patent No. **168,096**, dated September 28, 1875; application filed June 21, 1875.

To all whom it may concern:

Be it known that I, WILLIAM KUEHN, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Manufacture of Transferable Pictures, of which the following is a specification:

My invention relates to an improved manufacture of pictures in opaque colors for transfer to bank-safes or other articles to be decorated.

For said manufacture I take sheets of unsized paper, such as No. 2 book-paper, and coat one side thereof with a thin mucilaginous solution. Various glutinous or gummy liquids may be employed for this purpose. I will state, however, that a mucilaginous sizing devised and successfully used by me consists of parts, by weight, as follows: Extract slippery-elm bark, six parts; brown sugar, three parts; corn-starch, one part; rain or distilled water, thirty-two parts. The sheets, having been thus sized on one side, are dried by being hung across round poles placed horizontally, and then stacked for use.

In order to economize in time, labor, and pigments, I usually sketch or paint a number of fac-similes on one sheet. For this purpose I take a sheet, A, from the pile of prepared sheets, and, by means of a plate or pattern and a stencil-brush dipped in some pigment insoluble in water, I mark as many borders or sight-outlines upon the sized surface as correspond with the number of fac-similes I design to paint at one time. The thus stenciled surface I then coat with a priming of white lead or other suitable oil-color of such consistency as, in its set condition, to permit the stenciled borders to be visible through it. The condition of the sheet at this stage is intended to be represented in Figure 1, *a* representing the sized and painted surface, and *b* the border appearing through the coat of priming.

The border affords a valuable guide to the artist as to the precise space which the subject or picture proper is to occupy, and also secures an unoccupied margin for the subsequent handling in the process of transfer.

Down to this point the operations are purely mechanical, and can be performed by a child, or by suitable machinery, the only part of the entire process which requires artistic skill being the act of painting the picture *c*, as represented in Fig. 2. The picture, having been completed, is allowed the usual time to become set, and the painted sheet may then be laid away for completion of the process at any subsequent time.

The next step in my process is to remove any greasiness from the face of the picture by means of a sponge dipped in soap and water, or any weak alkaline solution, such as dilute aqua ammonia. I now take another of the sheets—which I will designate as sheet B—and, having moistened with water the rear or unsized sides of both sheets A and B, I apply to the now painted face of sheet A a final wash of mucilage. To the mucilage used for this final wash, I occasionally add a small quantity of aqua ammonia—not exceeding a fiftieth part of the volume of mucilage. The effect of the ammonia is to soften and blend the colors and outlines, and this ingredient is therefore used or not, and in greater or less proportion, according to the effect to be produced. The two sheets are then applied face to face, and when a sufficient number of such packs have been formed they are placed (with interposed sheets of bibulous paper, and these between blankets) in a press, and for a period of from four to twelve hours are subjected to a pressure of from five hundred to twelve hundred pounds, the duration and amount of pressure varying with the size of the pile and other considerations familiar to the art. The pile being then removed from the press, the packs are separated, and sheet A of each pack being then wetted and peeled off, leaves the picture proper adhering, face downward, to sheet B, and with its rear surface exposed to view. The now naked rear surface of the picture proper is then sponged to remove any mucilage adhering to it.

Fig. 3 shows the picture proper thus adhering to sheet B. In this figure a portion of the picture proper is, for the purpose of illustration, represented as rolled back; but of course in practice this does not occur. The pictures, thus prepared, may then be marked and laid away, or sent to any destination. This properly completes my manufacture, and it remains only to add directions for use.

For application of one of these pictures to

any desired object or backing, the rear side of the picture proper is thinly coated with copal or other varnish of sufficient tackiness, and, the portion of sheet B outside the border being trimmed off, the picture is applied, with its thus varnished rear side, to the object, and pressed evenly down by means of a suitable pad or rubber roller. Sheet B being then washed off, leaves the picture face outward upon the object, which completes the process.

Over the common processes of decoration of safes, japan-ware, &c., where opaque pigments are employed, the method above described possesses many decided advantages. For example: The artistic work proper is separated entirely from the merely mechanical manipulations, and may be done by lady artists and others at their own homes or studios, apart from the workshop and without interference with its operations.

I claim as new and of my invention—

The process of producing transferable pictures in opaque colors, consisting in the use of two sheets, A and B, sized on one side only, and of which sheet A has its sized surface marked or imprinted with the sight-outline or border, this coated with a translucent oil-color, on which the picture is subsequently painted, the thus sized bordered and painted surface of sheet A being then pasted face downward upon the sized surface of sheet B, from which sheet A is then peeled, so as to leave the picture proper adhering face downward to sheet B, and ready for the final transfer to the object to be decorated, substantially as set forth.

In testimony of which invention I hereunto set my hand.

WILLIAM KUEHN.

Attest:

GEO. H. KNIGHT,

JAMES H. LAYMAN.