

Sept. 24, 1946.

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2,408,147

TRANSFER SHEET

Filed June 24, 1944

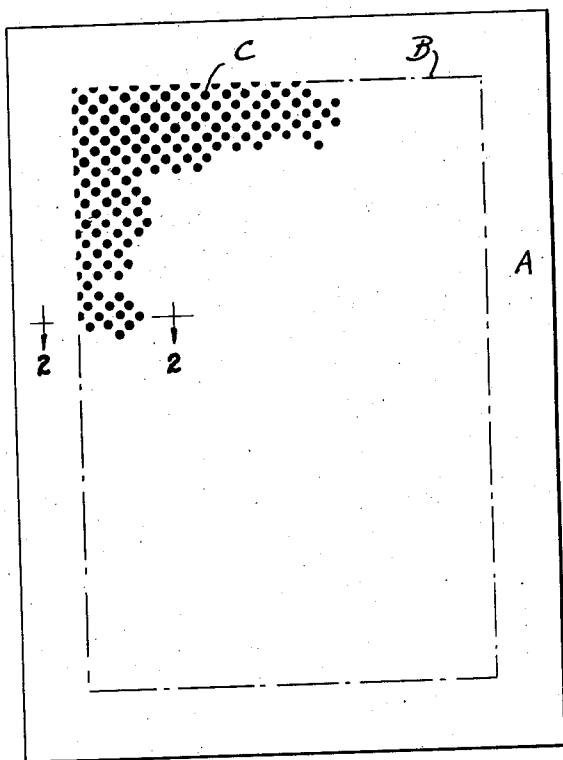


FIG. 1



FIG. 2

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2,408,147

TRANSFER SHEET

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Application June 24, 1944, Serial No. 541,910

2 Claims. (Cl. 41-33)

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This invention relates to a flexible substantially transparent sheet carrying on its under surface transferrable material in isolated regions or figures adapted to be transferred by pressure on the top of the sheet to an underlying copy sheet. The copy sheet, for instance, may carry an artist's sketch or drawing and the transfer sheet availed of to supply shading or additional matter to the drawing with great rapidity.

My transfer sheet is designed especially for carrying out the method of Patent 2,228,280, issued January 14, 1941, to Fine Art Manufacturing Company, as assignee of Theodore L. Maddock, and it is an object of my invention to improve on the transfer sheet Mr. Maddock provided for that purpose (as set out in his Patent No. 2,233,791, issued March 4, 1941), both as to its action in use and its durability.

While the transfer sheet of the last-mentioned patent was effective in producing transfers, it was found that such a sheet, comprising transferable material on a cellulose acetate base, would easily slip and become out of register unless firmly held in place over the underlying copy sheet.

I have found that I can accomplish the results desired in the Maddock invention by employing a carrying sheet which is waxed on the side which carries the ink, and which, while being sufficiently transparent to allow the original drawing to be readily observed beneath it, and while maintaining its ink in transferable condition for long periods, will not slip on the underlying sheet and may be partially turned back for inspection of the work whenever desired.

In carrying out my invention, I take a sheet of translucent paper having a face of wax and print on it with a transferable ink. Preferably, the paper is about 20 lb. sulphite bond and the coating may be made of paraffin having a melting point between 133° F. and 140° F. In making such a sheet it is simpler to apply the paraffin to both surfaces of the bond paper, as this enables the application to be made by dipping the paper in a supply of molten wax.

When the sheet is thus coated on both faces, and to some extent impregnated by the wax, the wax preferably amounts in weight to about one third of the total weight of the product. The wax may be readily applied to the sheet by drawing a web of paper through a molten quantity of the wax; then calendering the web if desired and finally cutting it into sheets.

After the sheet is produced, I print on it with transferable material in areas suitably spaced so as not to interfere with the effective transparency

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of the sheet. This printed matter may be in the form of separated dots or lines or figures to be transferred.

The drawing indicates diagrammatically my transfer sheet, in which Fig. 1 is a plan and Fig. 2 a cross section on a greatly exaggerated scale.

In Fig. 1 of the drawing, A indicates the waxed translucent sheet and B (in broken lines) the area on which the transferable material is printed. This entire area may be covered or only a portion thereof as desired, and the printed matter may take various forms. For ordinary shading it is very satisfactory to have the printed matter in the form of separated dots C. Such dots may readily be smaller and closer together than shown in Fig. 1, where they are enlarged for clearness of illustration. While only a comparatively few of these dots actually appear in Fig. 1, it is to be assumed that they extend over the entire portion of the sheet within the rectangle B.

When a sheet carrying such dots, for instance, is laid with the printed face downward over an outline sketch, the sketch is readily visible through the sheet, and the operator may thus apply shading to the sheet very readily and quickly, by moving a pencil or stylus with a moderate pressure across the proper area of the exposed face of the transfer sheet.

I find I can use satisfactorily on the waxed sheet an ink composed of the principal ingredients set out in the Maddock Patent 2,228,281, issued January 14, 1941, namely, ester gum, linseed varnish, carbon black and carnauba wax, in about the proportions there mentioned, though I prefer to increase somewhat the amount of carbon black. When such a composition is printed on the waxed sheet it will retain its transferable characteristics for a long period of time.

The wax coating on my sheet provides just enough adherence between the transfer sheet and the copy sheet so that in the process of transferring the user may turn back a portion of the transfer sheet to observe directly the result on the copy sheet and thereafter return the turned back portion to its exact original position. This adherence thus preserves the registration and enables the artist to inspect the result from time to time as desired. The adhering characteristic also does away with the necessity of using clamps or any extraneous means to locate the transfer sheet over the original drawing to be shaded or amplified.

As a further step in the manufacture of my transfer sheet, I may form a light coating of

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non-offset material over the printed isolated areas on the wax sheet immediately following the printed impression. Such coating prevents the ink printed on one sheet from offsetting onto the adjacent sheet in the process of manufacture and enables the product to be more readily handled, but being very thin does not interfere with the transference of the image by pressure of the user's pencil or his stylus on the non-printed face of the sheet. This non-offset coating is intended to be indicated in the diagram, Fig. 2, by the dots designated D.

For such non-offset coating I may employ a mixture of dextrine, glucose, water and alcohol. I make no claim to such composition, however, as mixtures having such ingredients are on the market for the purpose of preventing offsetting. One may employ for instance, the Non-Offset Spray Mix No. 135 sold by American Type Founders Company.

My transfer sheets may be very cheaply produced and will remain effective for a long period of time, which period may be further increased by wrapping each pack of sheets in waxed paper. In use, these sheets may be very readily handled, as the transferable material is not apt to be inadvertently rubbed off or displaced. The waxed

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sheet is sufficiently transparent so that the original drawing or other matter on the copy sheet may be very readily seen through the transfer sheet and thus the shading or addition readily applied. However, as stated, whenever the artist wishes to inspect the result of the application, he may readily do so by tipping back a portion of the transfer sheet without losing its registration for continuing the operation.

I claim:

1. A transfer sheet comprising a sheet of translucent paper coated with paraffin wax, there being isolated printed areas on the wax of an ink solid enough so as not to offset under normal handling of the sheet but transferable by concentrated pressure on the back of the sheet, said ink comprising principally carbon black, linseed varnish and ester gum.

2. A transfer sheet comprising a sheet of translucent paper coated with wax, there being isolated printed areas on the wax of an ink solid enough so as not to offset under normal handling of the sheet but transferable by concentrated pressure on the back of the sheet, said ink comprising principally carbon black, linseed varnish and ester gum.

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