

No. 655,067.

Patented July 31, 1900.

W. P. DUN LANY.

TRANSFER SHEET AND COMPOSITION THEREFOR.

(Application filed Mar. 31, 1899.)

(No Model.)

Fig. 1.

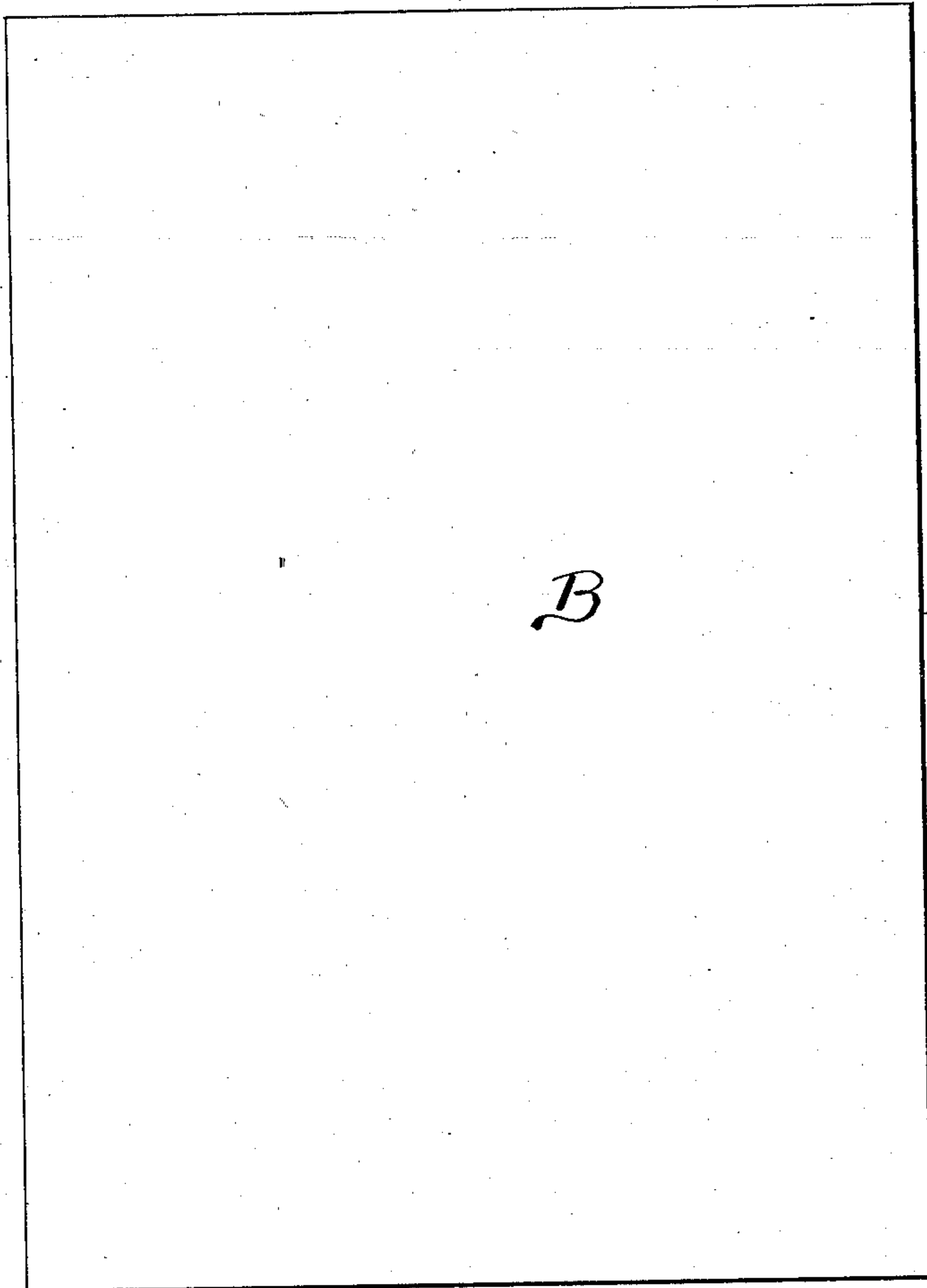
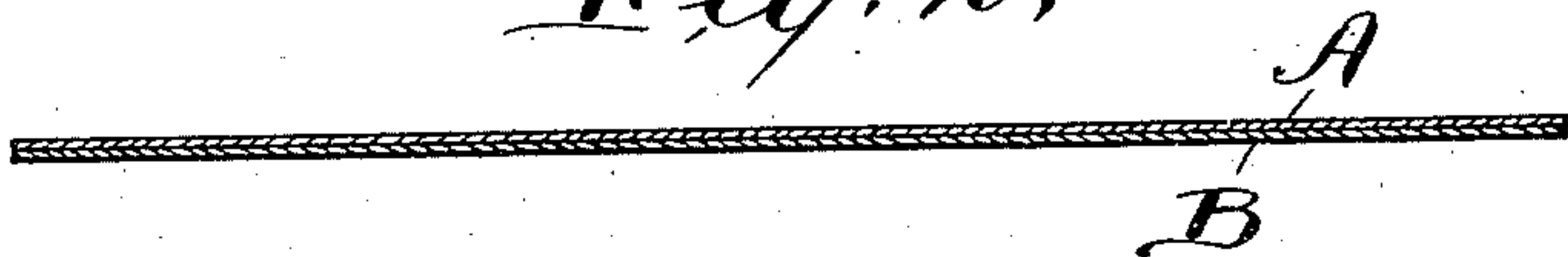


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM P. DUN LANY, OF CLEVELAND, OHIO, ASSIGNOR TO THE INTERNATIONAL FACSIMILEGRAPH COMPANY, OF SAME PLACE.

TRANSFER-SHEET AND COMPOSITION THEREFOR.

SPECIFICATION forming part of Letters Patent No. 655,067, dated July 31, 1900.

Application filed March 31, 1899. Serial No. 711,258. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. DUN LANY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Transfer-Sheets and Composition Therefor; of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The ultimate object of the invention is to provide a transfer-sheet adapted for the transference of sketches or writing to a metal sheet by pressure.

My transfer-sheet is particularly adaptable for use in connection with facsimile-telegraphs, where an image is transmitted by a stylus which traces over a metallic sheet having on it an insulating picture. In order that a stylus of the requisite fineness shall not break through the insulation, the latter must be of considerable hardness. At the same time it must not be brittle, and it must have sufficient permanence not to be obliterated or dimmed by handling and preferably permanence enough to allow many transmissions of it. The material must be accurately insulating, and it should have color enough, so that the transmitting operator may see that the message or picture is correct. If the material is also able to withstand the corroding action of etching acids, it may be used in receiving a facsimile picture, the sheet of metal being put into a bath and etched in an ordinary manner.

The invention purposes providing a transfer-paper which by the pressure of the pencil, stylus, or hammer on its back side shall transfer to a sheet of metal while cold an impression which shall ultimately have the characteristics above set out.

I find that the most satisfactory method of securing permanence and hardness of the picture is to bake the sheet after the picture has been transferred, and the transfer material must therefore be of such quality that it will not run with the heat nor crack and will afterward "set" or harden.

The invention includes both my transfer-sheet and the composition of matter therefor. The sheet is shown in the drawings, wherein—

Figure 1 is a plan, considering the sheet horizontal; and Fig. 2 is a vertical cross-section exaggerated in thickness.

The reference-letter A designates the sheet of paper, and B the transfer composition.

I have discovered that all the desirable qualities heretofore specified are obtained to a high degree from a paper having a coating of the following substances in the following proportions: printers' ink, (preferably lithograph-etching ink,) eight parts; wax, fifteen parts; tallow, fifteen parts; pulverized rosin or resinous matter, five parts; oil of turpentine, forty parts; dragon's-blood powder, seventeen parts; total, one hundred parts.

The dragon's blood is a gum coloring-matter, and it may be replaced by increasing the amount of rosin and adding a pigment, or, if desired, the pigment may be omitted and the printers' ink relied on for furnishing the color. The pulverized rosin gives a set to the material after it has been heated and furnishes an excellent insulation. The cerate furnishes body, the tallow prevents cracking, and the turpentine and printers' ink give the material the desired plasticity for transferring. The proportions may be varied quite widely.

Having described my invention, I claim—

1. A sheet covered with a coating of cerated and resinous matter, and adapted to be transferred by pressure to a metallic sheet.

2. A sheet having a coating of transfer material adapted to be transferred by pressure to a cold metallic sheet said coating being of a waxy character and thus adapted to protect the metallic sheet from the action of the acids employed in etching.

3. A transfer-sheet coated with a composition including wax, tallow and pulverized resinous matter.

4. A composition of matter for a transfer-sheet, consisting of wax, tallow, rosin and printers' ink.

5. A composition of matter for a transfer-sheet consisting of wax, tallow, rosin and oil of turpentine.

6. A composition of matter for a transfer-sheet consisting of wax, tallow, resinous matter, oil of turpentine and coloring-matter.

7. A transfer-sheet having a coating of printers' ink, wax, tallow, rosin, oil of tur-

pentine, and dragon's blood, in about the proportions specified.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM P. DUN LANY.

Witnesses:

ALBERT H. BATES,

PHILIP E. KNOWLTON.