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PROCESS OF MANUFACTURING WALL-PAPER.

TROUT

SPECIFICATION forming part of Letters Patent No. 335,725, dated February 9, 1886.

Application filed April 28, 1885. Serial No. 163,739. (No specimens.)

To all whom it may concern:

Be it known that I, SILAS EDGAR TROUT, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Process of Manufacturing Wall-Paper; and I do hereby declare that the following is a full, clear, and exact description of the said invention, which will enable others skilled in the manufacture to which it belongs to make and use the same.

In the manufacture of wall-paper the paper is first passed through what is known as a "grounding-machine," by which the ground-color is applied to the paper, which is then dried and afterward the figures or patterns are printed upon it in a printing-machine. Heretofore, if a bronze paper or figure was desired, varnish was applied in the printing-machine in the same way and at the same time as the colors. The paper was then passed into a drying-machine until the varnish had partially dried, and then was passed through a bronzing-machine, by which there was applied by brushes or some similar device, bronze or other decorative material of its nature, which thereby, coming in intimate contact with the surface of the paper, adhered to such portions thereof as were covered by the still sticky varnish.

My invention consists in employing silicate of soda or other similar material, which by its peculiar adhesive quality is susceptible of being used as a vehicle for attaching to the paper powder or other material calculated to produce an ornamental effect, and which at the same time is capable of being mixed with such bronze-powder or similar material, and applying the compound thus formed to the paper at the same time and by the same machine—viz., the printing-machine—and in the same manner as the ordinary colors for the figures or pattern are applied, thus avoiding the use of two machines, and effecting a saving in the time and labor employed and in the cost of materials used.

As a convenient means of carrying my invention into effect, I employ the machine usually employed by the manufacturers thereof in the printing of wall-paper, and into one or more of the color-troughs thereof, as the ex-

gencies of the pattern and sort of wall-paper to be produced may require, and pour a mixture—of, say, silicate of soda and powdered bronze (gilt)—forming a sort of liquid, making it about of the same thickness or consistency as that usually employed in the colors so employed, and then applying the mixture to the paper as colors are or may be applied, thus saving the use of a varnish and the employment of a special bronze-machine.

I prefer to use silicate of soda as and for the adhesive liquid aforesaid, and with it I combine, in the form of a liquid mixture of such consistency as is best calculated to facilitate the printing of the paper by the machine employed for that purpose, any required material—such as bronze-powder, diamond-dust, powdered glass, &c.—which are calculated to either adorn or illuminate wall-paper, and which have heretofore, on account of their character, required the use of varnishes, and have had to be, *ex perum natura*, applied in complicated and expensive machines, the use whereof has entailed the consumption of much motive power, time, labor, and expense, with the result of a very limited production per machine employed.

A striking advantage of my process consists in the fact that it is not necessary to wait from twenty-four to forty-eight hours, according to the humidity and temperature of the atmosphere, by reason of the necessary partial drying of the varnishes after they have been suitably printed on the wall-paper by the old method, and the fact that this step in the process being eliminated, so very great a saving of time is effected that within thirty minutes of the entry of the raw material into the printing-machine the paper can be put into the workman's hands for hanging on the wall.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

1. The use of silicate of soda as an adhesive liquid or vehicle, combined with and for the application of bronze-powder in the manufacture of wall-paper, substantially as and for the purposes and in the manner above described.

2. Wall-paper as an article of manufacture, produced by the employment of silicate of

soda, combined with bronze-powder, as an adhesive liquid or vehicle for applying said bronzes, pigments, or other materials to the surface thereof, substantially as and for the purposes hereinbefore described.

3. In the manufacture of wall-paper, the combination of bronze-powder or other substance for the ornamentation of the paper with silicate of soda or any adhesive liquid possess-

ing similar qualities, and the application of the compound thus formed to the paper in the manner and for the purposes hereinbefore described.

SILAS EDGAR TROUT.

Witnesses:

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