

UNITED STATES PATENT OFFICE

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PROCESS OF COATING SCREENS FOR THE PROJECTION OF PICTURES THEREON

No Drawing.

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My invention relates generally to screens for the projection of moving pictures thereon and to the production of these screens as new articles of manufacture and sale, and more especially relates to screens for the projection of talking moving pictures thereon, the screens in this instance preferably being perforate, but I am not to be understood as restricting my invention to any particular kinds of screens or to screens used for any particular class of picture display, my invention being applicable to all screens capable of the employment of my coating thereon and the purpose of which screens is to provide a surface for projecting pictures thereon.

A principal object of my invention is to provide a screen surface affording great depth of reflection or stereopticon projection, great distinctiveness of back-ground as well as foreground, and a very desirable clearness and brightness of the picture generally.

A novel feature of my invention is the provision of a reflecting coating for the screen having as one of its constituent elements a material composed of flaky light-reflecting or translucent particles which are distributed by the coating over the screen surface and conduce to the depth of reflection or stereopticon projection of the screen.

I attain the beforestated object, and such other objects as may appear herein, by the following method or process:

To the face of a piece or sheet of fabric, preferably perforate when the screen is to be used for projection of talking moving pictures thereon, I apply a thin coat of varnish as a priming and allow the varnished surface to remain in this condition until partly dry; to the partly dry varnished surface I then apply preferably by dusting it thereon, a powder, in dry condition, consisting of a portion of a metal powder, such as aluminum and a portion of a material composed of flaky light-reflecting or translucent particles, mineral silicates when ground being a class of such materials, and ground white mica being a particular instance of such a material, ground white mica moreover being found by me to be a material suitable for my

purpose, and having practically no tendency to clog the perforations when perforate fabric is used, the suitable proportions of aluminum in powdered form and ground white mica for providing the dusting powder being found by me to be about 75 per cent of aluminum powder and about 25 per cent of ground white mica, the aluminum powder being first quality for obtaining the best result; after an interval of about twenty four hours the detachable portion or excess of this powder is dusted off the coated fabric surface and a burnish coating of gilder's whitening is applied to the coated surface by a soft brush or other suitable means.

Having thus described my method or process, it should be understood that I may make modifications thereof and variations therein without departing from the spirit of the invention or exceeding the scope of the appended claims.

What I claim and desire to protect by Letters Patent is:

1. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, and applying to the primed surface a coating composed of a metal powder and a material comprising flaky light-reflecting particles.

2. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, applying to the primed surface a coating composed of a metal powder and a material comprising flaky light-reflecting particles, and applying to the surface of the fabric so coated a varnish coating.

3. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, and applying to the primed surface a coating composed of aluminum and mica.

4. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, applying to the primed surface a coating composed of alumi-

- num and mica, and applying to the surface of the fabric so coated a burnish coating.
- 5 The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, and applying to the primed surface a coating of aluminum powder and ground white mica.
- 10 6. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, applying to the primed surface a coating of aluminum powder and ground white mica, and applying to the surface of the fabric so coated a burnish coating.
- 15 7. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of fabric a priming, applying to the primed surface a coating of aluminum powder and ground white mica, and applying a coating of gilder's whitening the surface of the fabric so coated.
- 20 8. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of perforate fabric a priming of varnish, and applying to the varnished surface a coating of aluminum powder and ground white mica.
- 25 9. The herein described method of coating screens for the projection of pictures thereon which consists in applying to a piece or sheet of perforate fabric a priming of varnish, applying to the varnished surface a coating of aluminum powder and ground white mica, and coating with gilder's whitening the surface of the fabric so coated.
- 30 10. The combination with a piece or sheet of fabric, of aluminum and a material comprising flaky light-reflecting particles for providing a reflecting surface for the fabric.
- 35 11. The combination with a piece or sheet of fabric, of aluminum and mica for providing a reflecting coating for the fabric.
- 40 12. The combination with a piece or sheet of fabric, of aluminum powder and ground white mica for providing a reflecting coating for the fabric.
- 45 13. The combination with a piece or sheet of fabric, of aluminum and a material comprising flaky light-reflecting particles for providing a reflecting surface for the fabric, and gilder's whitening for providing a burnish coating for the reflecting surface.
- 50 14. The combination with a piece or sheet of fabric, of aluminum powder and ground white mica for providing a reflecting coating for the fabric, and gilder's whitening for providing a burnish coating.
- 55 15. As a new article of manufacture and sale, a piece or sheet of fabric constituting a screen for the projection of pictures thereon having a reflecting surface composed of a metal powder and material comprising flaky light-reflecting particles.
16. As a new article of manufacture and sale, a piece or sheet of fabric constituting a screen for the projection of pictures thereon having a priming coating of varnish, a reflecting coating of aluminum and mica and a burnish coating of gilder's whitening.
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