

# UNITED STATES PATENT OFFICE.

ISIDOR COHN, OF NEW YORK, N. Y., ASSIGNOR TO REBECCA COHN, OF  
SAME PLACE.

## PHOTOGRAPHIC SHEET.

SPECIFICATION forming part of Letters Patent No. 385,297, dated June 26, 1888.

Application filed January 21, 1888. Serial No. 261,522. (No specimens.)

*To all whom it may concern:*

Be it known that I, ISIDOR COHN, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Photographic Sheets, of which the following is a specification.

My invention relates to improvements in plates or sheets especially intended for use as a substitute for the metallic plates used by photographers in the taking of "tin-type" pictures, so called. My plates or sheets are, however, adapted for many other uses in the arts.

More particularly described, the invention consists in the treatment of sheets of paper or equivalent material with the substances hereinafter stated.

I prefer to use paper as the base for my sheet, selecting such as has sufficient thickness and strength to serve the purpose and having also a smooth surface. I have used very successfully the Manila paper known as "tag-paper" or "tag-board," using such as has a smooth hard surface. This paper, either in the sheet or roll or cut up into pieces of the desired size for the plates, I coat with a solution of gelatine dissolved in water, hot or cold, preferably using it hot, or at least warm. The solution should preferably be of about the consistency of very thin sirup. The coating of the paper may be effected by dipping or by applying the solution with a brush or equivalent means. After the gelatine has become dried, I coat it again with a solution of shellac dissolved in alcohol or its equivalent, with which is thoroughly mixed lamp-black in the proportions of about four table-spoonfuls of lamp-black to the quart of dissolved shellac. Both the shellac and the lamp-black should be of good quality. The dissolved shellac and lamp-black should be of about the consistency of thin sirup. After this second coating has dried, I prefer to calender the paper, at least on the side upon which the picture is to be taken, and preferably on both sides, in order to produce a hard smooth surface. The sheet is then again coated with "tin-type" japan, so called—that is to say, the japan used by the makers of tin-type plates. This should be done by dipping or flowing the japan upon the sheet. After the application of

the japan, it is baked or dried in any suitable japan-baking oven.

The plates or sheets produced by me, as above stated, may be used by photographers in the same way that the ordinary metallic plates are now used, with the following advantages—*i. e.*, they are much more elastic than the metallic plates and will not crack, even if subjected to much greater flexure than the metal plates will stand without cracking. They are much lighter in weight, hence better adapted to transportation through the mails or by express. They can be much more easily trimmed to fit frames, &c., and, lastly, are very much less expensive.

The application of the gelatine is for the purpose of filling the pores of the paper and affording a hard compact surface upon which the shellac shall be applied; and, although I prefer to use it in all cases, still, if the paper be sufficiently heavy and its surface hard and smooth, the shellac and lamp black may be applied directly upon it without using the preliminary coating of gelatine.

As stated, the paper may be treated in the roll and then cut up into sheets or pieces of the desired size, or it may be first so cut up and then treated, as stated.

Having described my invention, I claim—

1. As a new manufacture, paper coated with gelatine, shellac, and lamp-black and japanned, substantially as set forth.

2. As a new manufacture, paper coated with shellac and lamp-black and japanned, substantially as set forth.

3. The process herein described, consisting in first coating paper with a solution of gelatine, then drying the gelatine, then applying the coating of shellac and lamp-black, then japanning the resulting product and baking or drying the japan, substantially as described.

4. The process herein described, consisting in coating paper with shellac and lamp-black, then japanning the same and baking or drying the japan, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 20th day of January, A. D. 1888.

ISIDOR COHN.

Witnesses:

PHILLIPS ABBOTT,  
F. G. HERTER.