UNITED STATES PATENT OFFICE.

MAX PFAFFENZELLER, OF BROOKLYN, NEW YORK.

PROCESS OF MAKING TRANSPARENT TRANSFER-PAPER.

SPECIFICATION forming part of Letters Patent No. 522,350, dated July 3, 1894.

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To all whom it may concern:

Be it known that I, MAX PFAFFENZELLER, a subject of the Emperor of Germany, residing at Brooklyn, in the county of Kings and State 5 of New York, have invented certain new and useful Improvements in Processes of Making Transparent Transfer-Paper, of which the

following is a specification. This invention has reference to an im-10 proved process of making transparent transfer-paper to be used in the manufacture of wall-paper, lithographs, &c., for transferring designs; and the invention consists of a process of making transparent transfer-paper by 15 the following steps: first, giving a sheet of good paper a coat of boiled linseed-oil on both sides, and then permitting the paper to dry for some time; next, carefully wiping the paper on one side until it is dry and giving 20 to the other side a second coating of linseedoil and permitting it to soak into the paper; next, imparting a coat of lard-oil to the wipedoff side of the paper and also a third coat of linseed-oil to the opposite side, after which 25 the paper is again hung up for drying; giving then another coat of linseed-oil on the same side of the paper to which the linseedoil was applied before; next, applying a coat of lard-oil to both sides of the paper and al-30 lowing the paper to dry for a long period of time, then rubbing the paper with a soft piece of cloth until the surface is dry, and applying finally a coat of varnish, whereby the paper is hardened and rendered not liable to 35 crack.

In carrying out my invention, the paper selected is preferably a good quality of whitepaper, which is first coated on both sides with boiled linseed-oil, after which it is rolled 40 up and laid aside for about forty-eight hours. The paper is then wiped-off carefully on one side by means of a soft piece of cloth or other absorbent material until it is perfectly dry. The other side receives another coat of lin-45 seed-oil, after which the paper is hung up for about twenty-four hours. At the end of this time, the side that was wiped off receives a coat of lard-oil, while the other side receives a third coat of boiled linseed-oil, after which 50 the paper is hung up for drying for another twenty-four hours. At the end of this time

the paper receives a fourth coat of boiled linseed-oil on the same side to which the preceding coat was applied, and is hung up again for twenty-four hours. During the 55 drying of the paper the lard-oil serves to absorb the white specks that are formed on that side of the paper coated with the linseed-oil, so that a clear and transparent surface is obtained. The paper receives next a coat of 60 lard-oil on both sides and is then hung up for about a week, after which it is cleaned off on both sides with a soft piece of cloth until it becomes perfectly dry, when it receives a final coat composed of a solution of white 65 shellac, twenty-five parts, borax five parts and alcohol seventy parts. The solution hardens the surface of the transfer paper and prevents it from cracking. All of these coats must be applied very thin, care being taken 70 that all surfaces of the paper be fully coated.

When the paper is used for transferring, the design is traced by means of a stylus on the side which has received several coats of linseed-oil. The design thus traced is given 75 a good coating of printing ink diluted with sweet oil. This coating is then rubbed off with a piece of clean cloth or other absorbent material, only the outlines of the drawing then remaining in black. In this condi- 80 tion the transfer is laid on a flat form and the back of the same rubbed with a smooth steel instrument. This transfer can be used twenty to thirty times before fresh ink is applied. When the paper is used by lithog- 85 raphers, one coat of linseed-oil less than when it is used in the manufacture of wallpaper is used, for the reason that lithographers require a somewhat finer and more pliable paper for their comparatively small de- 90 signs than wall-paper manufacturers, where larger designs are usually transferred, which require a somewhat stronger and stouter paper.

Having thus described my invention, I 95 claim as new and desire to secure by Letters Patent—

1. The process herein described of making transparent transfer-paper, which consists in applying thin coatings of linseed-oil and roo lard-oil on both sides of the paper, drying the paper after each operation of coating, then,

before varnishing, rubbing the paper on both sides until very dry, and finally varnishing the paper, substantially as set forth.

2. The process herein-described of making 5 transparent transfer-paper, which consists in imparting to both sides of the paper a coat of boiled linseed-oil, wiping off one side of the paper and imparting successively several coats of boiled linseed-oil to the other side, o while giving a coat of lard-oil to the wipedoff side, drying the paper, and then giving a coat of lard-oil to both sides of the same,

then drying the paper for a long period of time, and then rubbing carefully both sides of the paper, so as to remove the surplus oil, 15 and finally varnishing the paper, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in pres-

ence of two subscribing witnesses.

MAX PFAFFENZELLER.

Witnesses:

PAUL GOEPEL, K. R. BRENNAN.