

UNITED STATES PATENT OFFICE.

JOSEF KLOIBER, OF OREGON CITY, OREGON.

METHOD OF MAKING PATTERNS FOR THE MANUFACTURE OF PAPER CONTAINING WATER-MARKS OF VARIOUS DESIGNS.

1,041,301.

Specification of Letters Patent.

Patented Oct. 15, 1912.

No Drawing.

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To all whom it may concern:

Be it known that I, JOSEF KLOIBER, a subject of the German Emperor, residing at Oregon City, in the county of Clackamas and State of Oregon, have invented certain new and useful Improvements in Methods of Making Patterns for the Manufacture of Paper Containing Water-Marks of Various Designs, of which the following is a specification.

The present invention relates to a method of making patterns for producing on paper water marks of various designs.

The hitherto used process of producing water marks on paper consists in that wires are pressed on the moist pulp. To produce complicated designs by such process is evidently very difficult and expensive.

The object of my invention is to enable the production of any desired water mark design on paper. To accomplish this, I form paper patterns, by first making paper boards, then etching the desired design in plates of any suitable rigid material, as copper, zinc or the like, then making an impression of the etched design on a sheet of paper containing a layer of a certain chemical composition and by subsequently pasting the said sheet on the paper boards. The paper patterns are then applied in calender machines in lieu of the wires, to make the impression in the paper. The paper patterns can be repeatedly used and when worn out can be turned into paper pulp.

The paper boards are made as follows: I prepare a mixture of potato starch, dissolved casein, paper pulp, ammonia and water, which mixture is boiled and then cast into the shape of boards or plates. I then have plates of suitable rigid material, as copper, zinc or the like etched in accordance with the desired design. I then prepare a paste-like mixture of water, gelatin, lime, salmiac; alcohol and glycerin, which mixture I boil and filter. I then apply a layer of this paste on a sheet of paper, which I place on

top of the etched plates. Under the application of heat I roll this paste-like mass on top of the etched plates so that the design is impressed therein and in the paper sheet. This sheet having the embossed design is then allowed to cool off and is pasted to the above named paper board, which now forms the pattern. The pattern boards may be used in calender machines in the same manner as the hitherto used wires for the production of water marks in paper.

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

1. A method of making patterns for the production on paper sheets of water marks of various designs, consisting in first making paper boards or plates, then etching the desired design in rigid plates, then placing the sheet of paper on top of the etched design, then applying a layer of paste-like mass on to said paper, thereupon making an impression of the said etched design in said layer and finally pasting the said embossed paper sheet onto the said paper board or plate.

2. A method of making patterns for the production on paper sheets of water marks of various designs, consisting in first making paper boards or plates, then etching the desired design in rigid plates, then placing a sheet of paper on top of the etched design, then applying a layer of a paste-like mass prepared of water, gelatin, lime, salmiac, alcohol and glycerin on top of said paper sheet, rolling over said layer under application of heat, and thereby making an impression of the design therein, and in the paper, cooling said sheet and pasting the same onto the paper board or plate.

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

JOSEF KLOIBER.

Witnesses:

JACOB MISHELS,
B. T. MCBAIN.