

# UNITED STATES PATENT OFFICE.

CHARLES HANSEN, OF EBELTOFT, DENMARK, ASSIGNOR TO HIMSELF,  
SOPHUS OERTING, OF SAME PLACE, N. H. HOLMES, OF MONTGOMERY,  
ALA., AND P. J. MCKENZIE OERTING, OF WARRINGTON, FLA.

## IMPROVEMENT IN PAPER PANELS TO IMITATE WOOD.

Specification forming part of Letters Patent No. **199,435**, dated January 22, 1878; application filed  
April 23, 1877.

*To all whom it may concern:*

Be it known that I, CHARLES HANSEN, of Ebeltoft, Denmark, have invented a new and Improved Paper Panel, of which the following is a specification:

This invention relates to a peculiar process for treating paper boards to render them impervious to moisture and solid in structure, and to give them the appearance of the finer kinds of wood; and it consists in impregnating paper boards with oil, having added to it a small quantity of drier, and afterward compressing them and drying them.

In carrying out my invention, I take paper boards made from either straw, wood, or rags, and place them in boiled linseed-oil, with which ten per cent. of "mongal" or other drier is mixed.

When the boards are to be finished very hard I add five per cent. of copal varnish. The oil may be either cold or hot, according to the requirements of the case. When the boards have become thoroughly saturated with the oil they are removed and placed in a press, or run through rollers, or otherwise compressed, removing the superfluous oil and giving greater solidity to the board. The boards are then placed in an oven or drying-room, in which a temperature of about 70° Reaumur or 190° Fahrenheit is maintained, until the paper is fully dry, which will require

from twenty-four to forty-eight hours, according to the thickness of the board.

The boards thus produced are varnished, lacquered, painted, or otherwise finished, and are used for panels, ceiling, wainscoting, and other purposes where the finer grades of wood are used.

It is impervious to moisture, will not crack, split, or warp, and can be nailed, sawed, and manipulated in other ways in the same manner as wood.

I am aware that it is not new to make paper water-proof by impregnating with oil and then subjecting to heat; but I harden and consolidate sheets of paper-board into a substantial paper-wood by adding to the oil a strong drier that is uniformly distributed by the oil through the inner fibers of the material, the superfluous oil being then expressed and the boards forced firmly together until they are united into a solid mass or panel, which is afterward dried.

What I claim is—

A solid paper panel for ceilings and wainscotings, consisting of several paper boards saturated with oil and drier, and consolidated into a solid board, as set forth.

CHARLES HANSEN.

Witnesses:

J. DAHL,  
J. BISCHOFF.