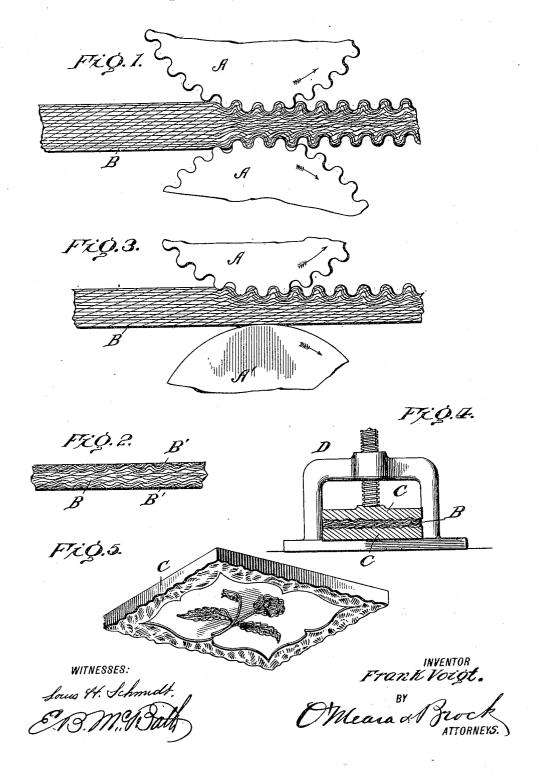
F. VOIGT.
PROCESS OF CHANGING WOOD.
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ME NORRIS PETERS CO., WASHINGTON, S. C.

UNITED STATES PATENT OFFICE.

FRANK VOIGT, OF GRAND JUNCTION, COLORADO.

PROCESS OF CHANGING WOOD.

No. 839,680.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Frank Voigt, a citizen of the United States, residing at Grand Junction, in the county of Mesa and State of Colo-5 rado, have invented a new and useful Process of Changing Wood, of which the following is a specification.

This invention relates to a process for changing, shaping, or forming the natural 10 grain of the wood into an artifical grain, whereby a wood having a straight grain is changed into a wood having a curved or wavy grain, the said wood thereby resembling when brought to a smooth surface and 15 polished a wood having a natural curly grain.

The process consists of submitting the wood to considerable pressure and in contacting with an irregular pressing-surface, thereby bending or corrugating or otherwise 20 twisting the grain from a natural to an artifi-

cial direction.

In order to more clearly describe the process, I have shown mechanism by which said

process is carried out.

In the accompanying drawings, Figure 1 is a side elevation showing portions of corrugated rollers and a piece of wood passing therethrough. Fig. 2 is a side elevation of a piece of wood after the same has been acted 30 upon by the rollers and has been planed down to presenting smooth upper and lower surfaces. Fig. 3 is a side elevation illustrating a mechanism for corrugating but one side of a piece of wood. Fig. 4 is a side elevation 35 of a press adapted to carry out the process in substantially the same manner as the form shown in Figs. 1 and 3. Fig. 5 is a perspective view showing the under roughened face of one of the dies.

In the drawings, A represents two corrugated rollers spaced apart, and B represents a piece of wood which is run between said rollers and corrugated upon its upper and lower faces, thereby changing the straight 45 grain of the wood into a wavy grain corresponding to the corrugations formed upon the piece of wood. The wood thus treated is then planed or sawed down to again bring it back to smooth upper and lower surfaces B',
so as shown in Fig. 2. These surfaces when polished or otherwise treated will display a

broken, wavy, or curled grain instead of the straight grain which was first presented. In cases where the wood has to be run between

the two corrugated rollers or is to otherwise 55 have both of its faces acted upon I prefer to steam the wood before subjecting it to the treatment above described.

Where the graining effect is to be produced only upon one face of the wood, steaming has 60 not been found to be necessary, and the wood so treated may be run between one of the corrugated rollers A and a roller A', having a

smooth pressure.

It is not essential to the process that the 65 wood be acted upon by the exact mechanical construction described, as the wood, especially when in small pieces, may be placed in a press D and its faces acted upon by dies C, which dies are formed with roughened or ser- 70 rated faces of various designs and adapted to force the grain of the wood from its natural straight lines into curled or wavy lines. Where the work so treated has been first steamed, it is held in iron molds until dried 75 before having the roughened or corrugated surfaces planed off.

It will also be understood that designs of any desired ornamental character may be formed upon the rollers or dies and impressed 80 into the wood, the process being the same whatever the nature of the design formed

upon the rollers or dies.

In treating soft woods, such as cottonwood and poplar, the spongy nature of the 85 wood makes it necessary to hold the distorted grain in the artificial position in which it has been forced until it has set. With such soft woods a coating of thin hot glue is brushed quickly over the surface immediately 90 after the wood has been planed, and a piece of paper is laid over the glue, and the same is covered with a smooth board or placed in any suitable mold or press, so as to subject the wood being treated to more or less pressure. 95 After the glue is dried the paper and glue are scraped or planed off.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is-

The process herein described consisting of bending by pressure the natural grain of a block of wood, and planing the said block, cutting through bent portions of the grain.
FRANK VOIGT.

Witnesses:

WALTER S. SULLIVAN, J. W. Sawyer.