

(No Model.)

W. H. ROYSTONE.
WOOD ORNAMENTATION.

No. 313,535.

Patented Mar. 10, 1885.

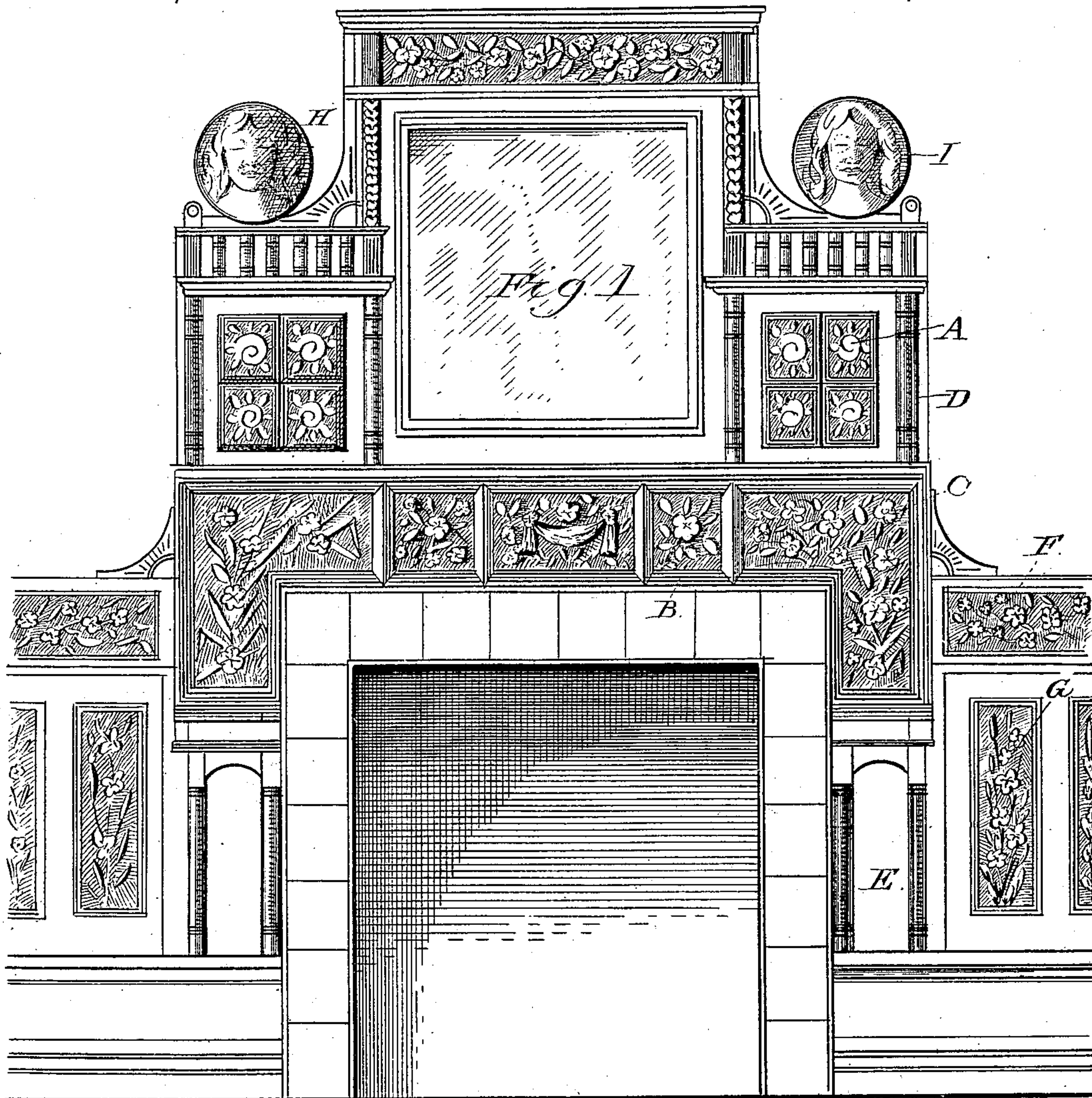
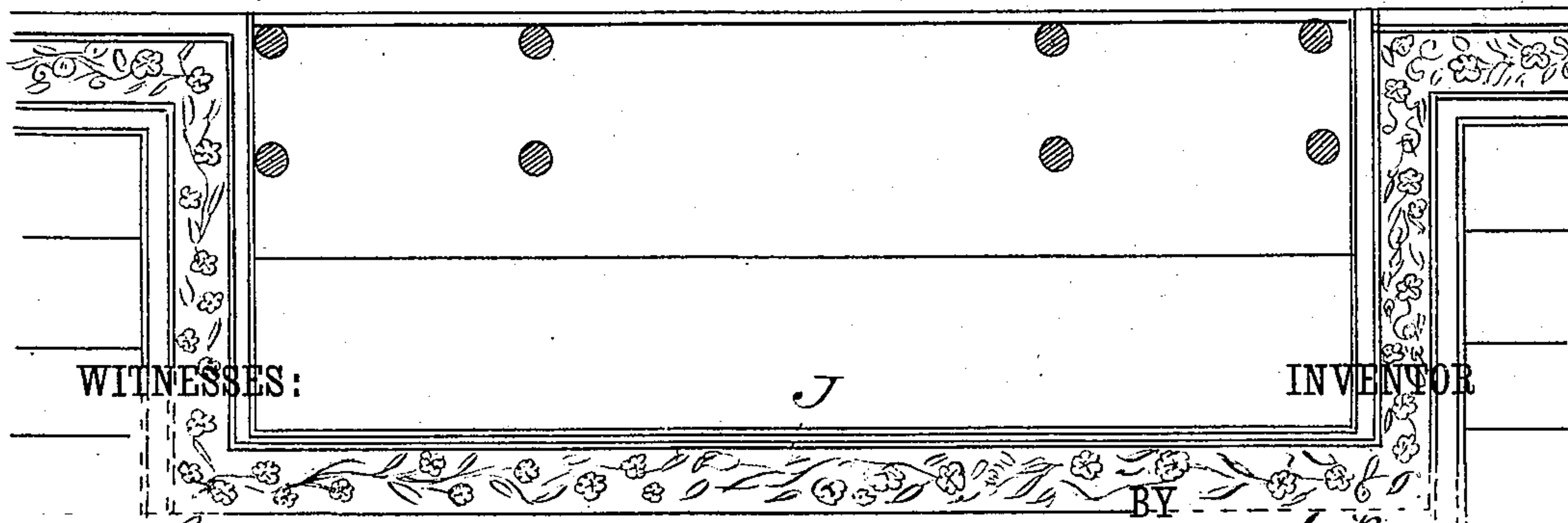


Fig. 2.



WITNESSES:

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WOOD ORNAMENTATION.

SPECIFICATION forming part of Letters Patent No. 313,535, dated March 10, 1885.

Application filed July 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HERBERT ROYSTONE, a subject of the Queen of Great Britain, residing at Corona, in the county of Queens and State of New York, have invented certain new and useful Improvements in the Ornamentation of Architectural and other Wood-Work, as will be hereinafter fully described; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in the ornamentation of wood-work designed for use in the fitting up and finishing of the interiors of buildings, ships, railway-carriages, and the like, and generally, as with plaques, detached panels, furniture, &c., where a decorative or ornamental effect is desired to be produced.

In the accompanying drawings, I have illustrated in Figure 1 in elevation my improved product as applied to the wainscoting and mantel of a room, and in Fig. 2 in plan the same as applied to the floor upon which the mantel stands.

A, B, and C represent the flat portions of the mantel, and D E rounded or turned portions thereof, ornamented in accordance with my invention.

H and I represent detached plaques, F and G portions of the wainscoting, and J and K, respectively, the border and center of the inlaid floor, all of which are ornamented in like manner.

Previous to my invention it has been customary to produce decorative designs upon wood-work of the character represented by carving or painting. The fragile character of the former and the liability to wear of the latter render them, however, non-durable in comparison with the main body of the wood itself, while the skilled labor required for their production and repair is expensive and often difficult to procure. It has also been proposed, in the ornamentation of veneering and other articles of wood, to employ a revolving roller internally heated, and provided on its outer surface with relief projections corresponding to the design to be produced upon the said ve-

neering during its passage between the printing-roller and a lower bed-roller. The relief projections in this instance sink into and burn the design upon the wood. Several defects exist, however, in this mode of treatment. The design itself, which should be uniform in color, presents oftentimes an unevenly-charred appearance, consequent upon unequal heating of the projections. The edges of the background adjoining the parts of the design are burned, confusing the two and destroying the desired æsthetic effect.

To obviate these difficulties is the object of my present invention; and it consists, broadly, in producing the design in bold, clear, raised outline of the natural color of the wood, by means of a branding-tool provided on its bearing-surface with intaglio lines constituting a female die, and adapted to be forced down upon the body of the wood by pressure. The tool employed for the purpose should be of a size and diameter proportioned to the particular work in hand; but for ordinary uses will be about six (6) inches in length and provided with a suitable non-conducting handle. The tool will be of copper or other suitable metal.

The mode of procedure is as follows: The wood is first dampened by water or steam. It is then preferably mounted upon an elastic bed of rubber or other suitable yielding substance. The red-hot branding-tool is then forced down upon the wood with a pressure commensurate to the desired height of the design to be produced and the gradations of tone and shadow wished for. As the solid parts of the die begin to enter the wood they burn or char its surface at the points of contact. The air contained in the die-lines at the same time becomes rarefied by the heat, and, together with the steam generated from contact of the red-hot tool with the moistened wood, forms a non-conducting cushion between the die-lines and the untouched portion of the wood. The presence of this vapor is sufficient during the brief period of application of the tool to prevent the design from being charred. Upon the removal of the tool, therefore, it stands out clear and distinct from the charred background. The presence of the elastic cushion prevents the stamp from making a deeper im-

pression at one point of the wood surface than another, which would otherwise happen if slight unevenness should exist upon the said wood surface. Where the quality of the wood is uniform, however, the cushion may be dispensed with.

The branding operation being completed, as above described, it is desirable to secure a suitable finish upon the article before the latter is put in use. This is effected by applying with a brush a single coating of transparent varnish or shellac, pure or very slightly diluted with turpentine, as the hardness and condition of the wood may determine. The unburned portions of the wood absorb this coating, leaving their surfaces of a dull appearance. The charred background, however, whose porous and absorbent qualities have been destroyed, retains the varnish upon its surface, which accordingly assumes a finished gloss, forming a highly decorative contrast to the design proper. If desired, a uniform gloss can be imparted to the whole by a second coating.

As an alternative mode of finishing, I may impart a gloss to the design by rubbing into it sufficient oil to give the desired polish. The charred background will not absorb the oil, and will consequently remain in its natural state. This treatment is, however, only applicable to hard woods.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A wooden article having on its face or upper surface a raised design in relief, of the natural color of the wood, and representing the design to be illustrated, the entire background charred or burned below said surface, substantially as described.

WILLIAM HERBERT ROYSTONE.

Witnesses:

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JAMES A. HUME.