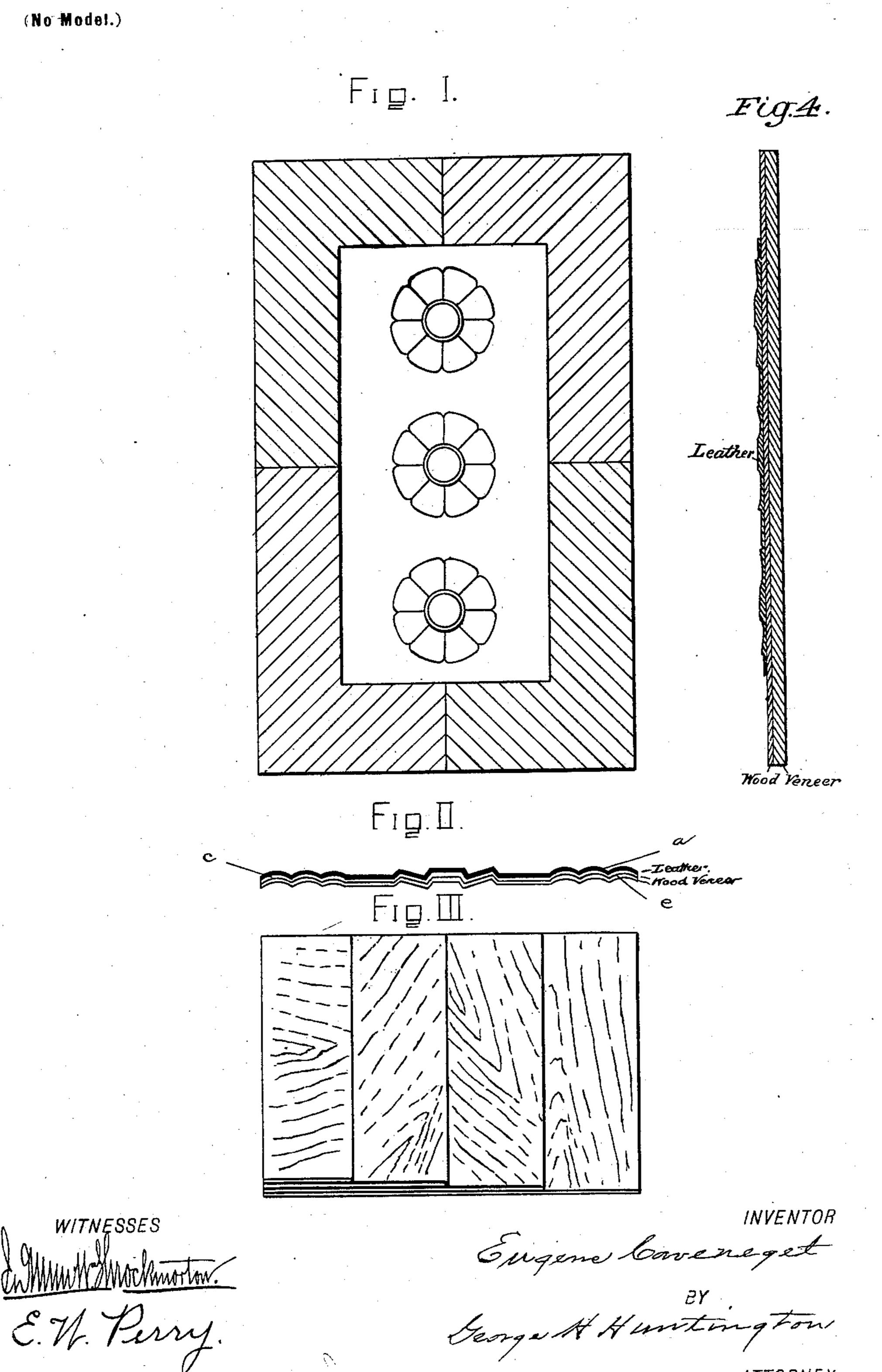
W/TNESSES

## E. CAVENEGET.

## COMPOSITE EMBOSSED PANELING AND VENEERING.

(Application filed Jan. 28, 1899.)

(No Model.)



## United States Patent Office.

EUGENE CAVENEGET, OF NEWARK, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE COMPOSITE VENEERING COMPANY, OF NEW JERSEY.

## COMPOSITE EMBOSSED PANELING AND VENEERING.

SPECIFICATION forming part of Letters Patent No. 628,647, dated July 11, 1899.

Application filed January 28, 1899. Serial No. 703,755. (No specimens.)

To all whom it may concern:

Be it known that I, EUGENE CAVENEGET, a citizen of the United States, residing in the city of Newark, county of Essex, and State of 5 New Jersey, have invented a new and useful Improved Article of Manufacture known as "Composite Embossed Paneling and Veneering," of which the following is a specification.

This invention relates to an article of manuto facture to be known as "composite embossed paneling and veneering." It is made of two or more ply veneer and a sheeting of leather which covers the surface, the same being glued together and embossed, as hereinafter 15 explained.

In the accompanying drawings, which form a part of this specification, I have illustrated my invention in four figures each containing letters of reference to indicate corresponding

20 parts, as follows:

Figure 1 represents a panel such as may be used in wainscoting on the side of a car, showing a face view with the center portion embossed in raised figures. Fig. 2 represents a 25 transverse section of the same through the center, showing the manner in which the veneer and leather conform to each other when embossed. Fig.3 represents a face view showing four thicknesses of veneer with the grain 30 running in different directions. Fig. 4 represents a sectional view showing the lower sheet of wood increased in thickness to resist the shrinking of the leather and prevent warping.

Referring to Fig. 1, the face view repre-35 sents the leather surface, and in Fig. 2 the top black line a represents the leather and the two lower sections c and e represent the wood veneer. The number of pieces of veneer necessary to produce the best results depends en-40 tirely upon the use to which it is to be applied, as well as the thickness of the leather. If a heavy leather surface is desired, where rich expensive work is being constructed, it is necessary to use three or more thicknesses of ve-45 neer, each with their grain running in as many different directions, as shown in Fig. 3; but where light work is desired, such as small chair-seats and very small paneling, only two thicknesses of veneer are required, each of

course with its grain running in a transverse 50 direction to its neighbor.

In making the panel it is best to use a cement that is impervious to dampness or water and one that will to some extent penetrate the pores of the wood as well as that of the leather. 55 For this reason, therefore, I have adopted the use of a case in cement—that is, a cement made from animal casein, lime, &c.

I would state that the leather has a tendency to shrink slightly in the direction of the grain 60 of the adjacent piece of veneer, which would cause a slight warp with the grain of that piece, the leather being the concave side. Therefore to prevent this the lower piece of veneer, which has its grain running in the op- 65 posite direction to the first piece, is made sufficiently thick to offset the action of the leather, it being understood that the thick lower piece, having its upper side dampened by the cement, will have a tendency to warp in an op- 70 posite direction from that of the leather and first piece of veneer. Thus the panel is held quite flat by the two opposing forces.

To construct the panel, the cement is applied to the upper side of each successive 75 piece of veneer. The requisite number of pieces of veneer are then laid one on top of the other, with their grain running in as many different directions as the number of pieces will permit. A sheet of leather is then placed 80 on top of the veneers, it being understood that the upper surface of the veneer, to which the leather is applied, is coated with the glue. After the leather is placed upon the veneer the whole is then placed under the embossing-85 press and all embossed together under a very heavy pressure. Thus the sheets of veneer are drawn and stretched to conform to the concavity or convexity of the embossing before the glue is set and without breaking or 90 destroying the fiber of the wood. In this way the pieces are positively secured together without the possibility of air-blisters between the parts. The panel thus formed is allowed to remain under pressure until the glue is 95 thoroughly hardened, when it is released and piled away for use. Panels or sheeting of this construction can be bent in almost any form

around large pillars or the corners without in the least disfiguring the surface, as the wood will always stretch or contract to accommodate the leather.

5 I am aware that paper with wood-veneer surface has been glued together and embossed, also that wood veneers have been embossed; but these must always be used on a flat surface, as the wood veneer will split 10 or sliver if bent.

My improved article of manufacture is intended to take the place of leather where it is used for chair (cobbler) seats and backs, also paneling, wainscoting, &c., where rich 15 leather finish is desired.

I would also state that in the construction of my improved paneling the very cheapest and commonest kind of veneer can be used, that kind, in fact, which could not be used 20 for any other purpose, for the reason that the defects of the wood when embossed are covered up by the leather and nothing but the finished-leather surface is exposed to view.

Having thus described my invention, what

I claim, and desire to secure by Letters Pat- 25 ent of the United States, is as follows:

1. As an article of manufacture, composite paneling constructed from two or more sheets. of veneers and a surface covering of leather glued together and embossed with concavo- 30 convexo configurations while the glue is still plastic so that the wood and leather all conform to each other, substantially as described.

2. As an article of manufacture, composite veneering or paneling constructed from two 35 or more sheets of wood veneers, the bottom sheet being thicker than its neighbor, and a surface sheet of leather resting upon the thinnest sheet of veneer, all glued together and the whole embossed in concavo-convexo con-40 figurations, substantially as described.

In testimony that I claim the foregoing specification I have hereunto set my hand this

20th day of January, 1899.

EUGENE CAVENEGET.

In presence of— W. L. MURRAY, EDMUND W. THROCKMORTON.