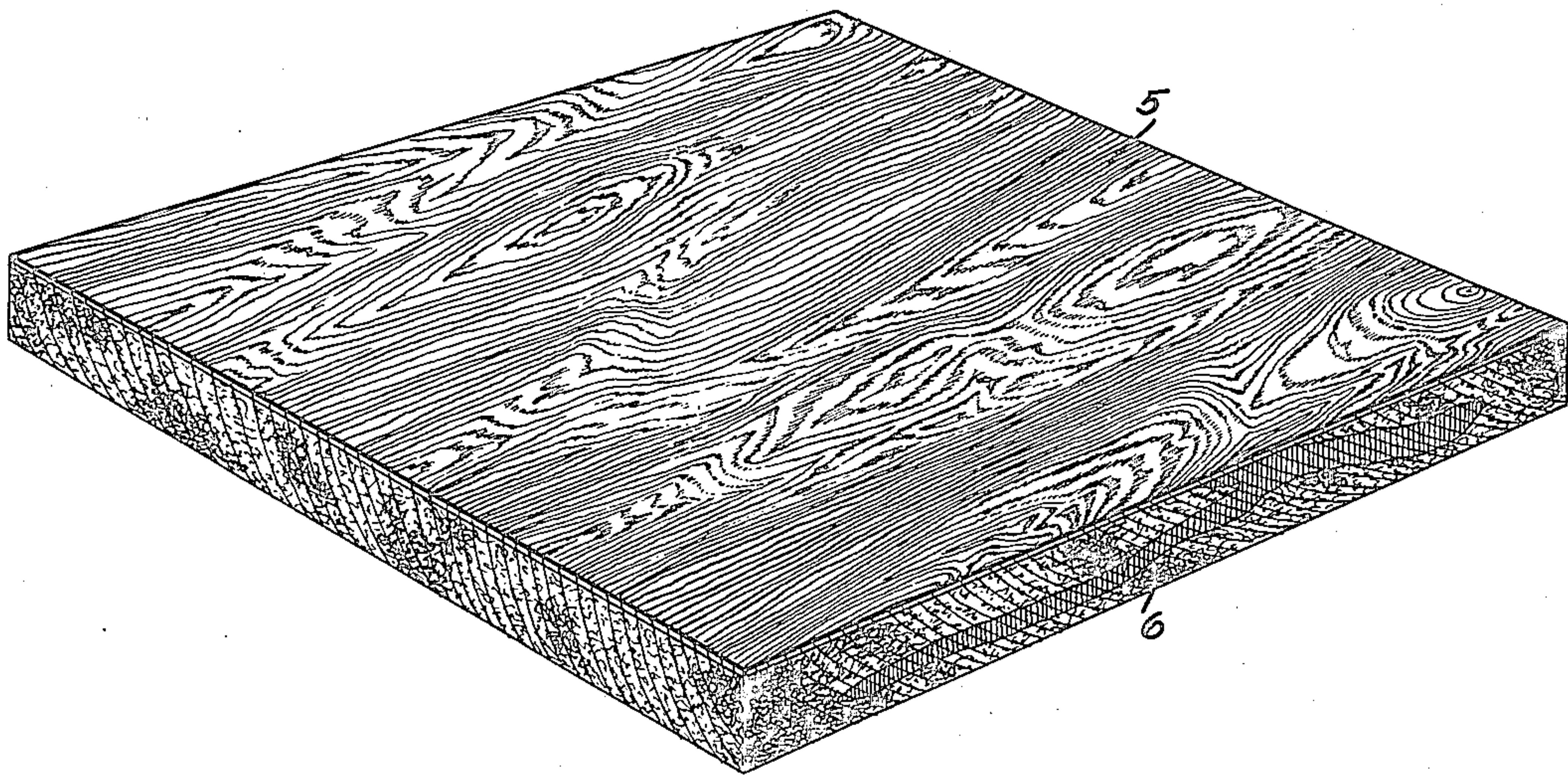


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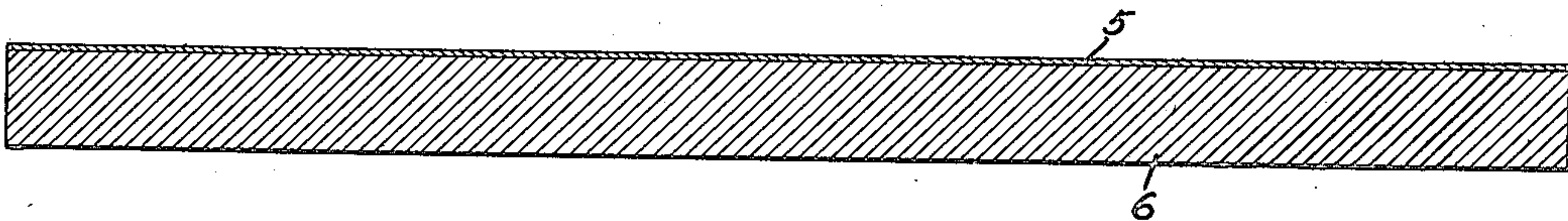
O. P. CADMUS.  
PLY WOOD.  
FILED MAY 26, 1921.

1,441,061.

*Fig. 1.*



*Fig. 2.*



WITNESSES  
*Frank J. Faggiani*  
*A. H. Wood*

INVENTOR  
OSCAR P. CADMUS  
BY *Munn & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

OSCAR P. CADMUS, OF BAYSIDE, NEW YORK.

PLY WOOD.

Application filed May 26, 1921. Serial No. 472,764.

*To all whom it may concern:*

Be it known that I, OSCAR P. CADMUS, a citizen of the United States, and resident of Bayside, in the county of New York and State of New York, have invented a new and Improved Ply Wood, of which the following is a full, clear, and exact description.

In structures, in which the law requires, or it is advisable to utilize fire proofed materials, considerable difficulty has been experienced in providing decorative surfaces, such as panels, which would incorporate fire resisting qualities, and which would also present a pleasing appearance.

Although wood is capable of being treated by any number of well-known processes to render it fire-resisting, it is well understood that this treatment results in an impregnation of the fibres and grain of the wood with a fluid which will virtually destroy any artistic effect which may be desired.

With this in mind, my present invention aims to provide an article which might conveniently be termed "ply wood" by means of which the panels or other objects may be provided which will incorporate fire-resisting qualities, and at the same time will present a grain and backing finished in a manner corresponding to wood of the usual type.

A further object of my invention is the provision of a ply wood which will incorporate the advantages set forth in the preceding paragraph and which will also be capable of being manufactured at a minimum figure.

Further objects of my invention will become apparent in the annexed specification taken in connection with the drawings which illustrate the finished appearance of a body embodying my improved construction, the same being represented in—

Figure 1 in perspective, and in Figure 2 in section.

I aim to accomplish my improved result by providing a body which is fire-resisting throughout the major portion of its thickness, that portion of the same which is not treated by the fire-proofing process being capable of being finished by means of the usual treatment accorded to wood, in that the grain will thus not be injured, nor will those qualities of the wood permitting of its being artistically finished, be destroyed.

I preferably accomplish this result by forming the body of the finished article of two layers of wood 5 and 6, the former not having been subjected to a fire-proofing process, the latter being of a thickness greater than the former, and having been subjected to a fire proofing process.

The layer 6 may be of any desirable cheaper type of wood, and constitutes the base of the body. This layer is cut to the shape desired, and subjected to a fire-proofing process such as by utilizing phosphate and sulphate of ammonia salts, which are applied together with other suitable ingredients to the layer of wood by means of high pressure so as to thoroughly impregnate the same.

Thus the layers 6 will possess the usual fire-resisting qualities, such as are desired, and in some instances, required by law. After the layer of wood thus treated has been fully seasoned, it is preferably surfaced to a true plane, and the face veneer or layer 5 of non-fire-proofed wood is glued to the same with a suitable substance, and under strong pressure.

The result is a body of fire-proofed wood, or new lumber element, with a facing of fine wood, which is not fire-proofed, suitable for use in numerous adaptations, such as in buildings where it is desired to have hard wood trimming, wainscoting, etc.; where the law requires such wood must be fire-proofed. By the term "lumber element" is, of course, meant an element constructed solely of ligneous material, which may be sawn, cut and finished as readily as a unitary length of wooden planking or the like.

It will be found that the layer 5 is of such a comparative thickness that no danger of a conflagration starting will exist in that the fire will be unable to penetrate the layer 6 of the body, and thus a highly artistic result will be produced which will incorporate the fire-resisting qualities desired.

It will be understood that my invention is applicable to numerous adaptations and that the finished article may be produced at an extremely nominal figure.

Further it will be understood that modifications of construction and steps in the process of manufacture may be resorted to

without in the least departing from the scope of my claim; which is:

As a new article of manufacture, a lumber element for the building trades including a backing layer and a superposed surface layer permanently adhesively secured together at their meeting faces, the backing layer being of much greater thickness

than the surface layer, the backing layer being constructed of wood and being impregnated throughout with fire-proofing material, and the surface layer being also constructed of wood but being free of any such impregnation. 10

OSCAR P. CADMUS.