

G. A. WRIGHT.
BUILT-UP LUMBER SHEET.
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947,508.

Patented Jan. 25, 1910.

Fig. 1.

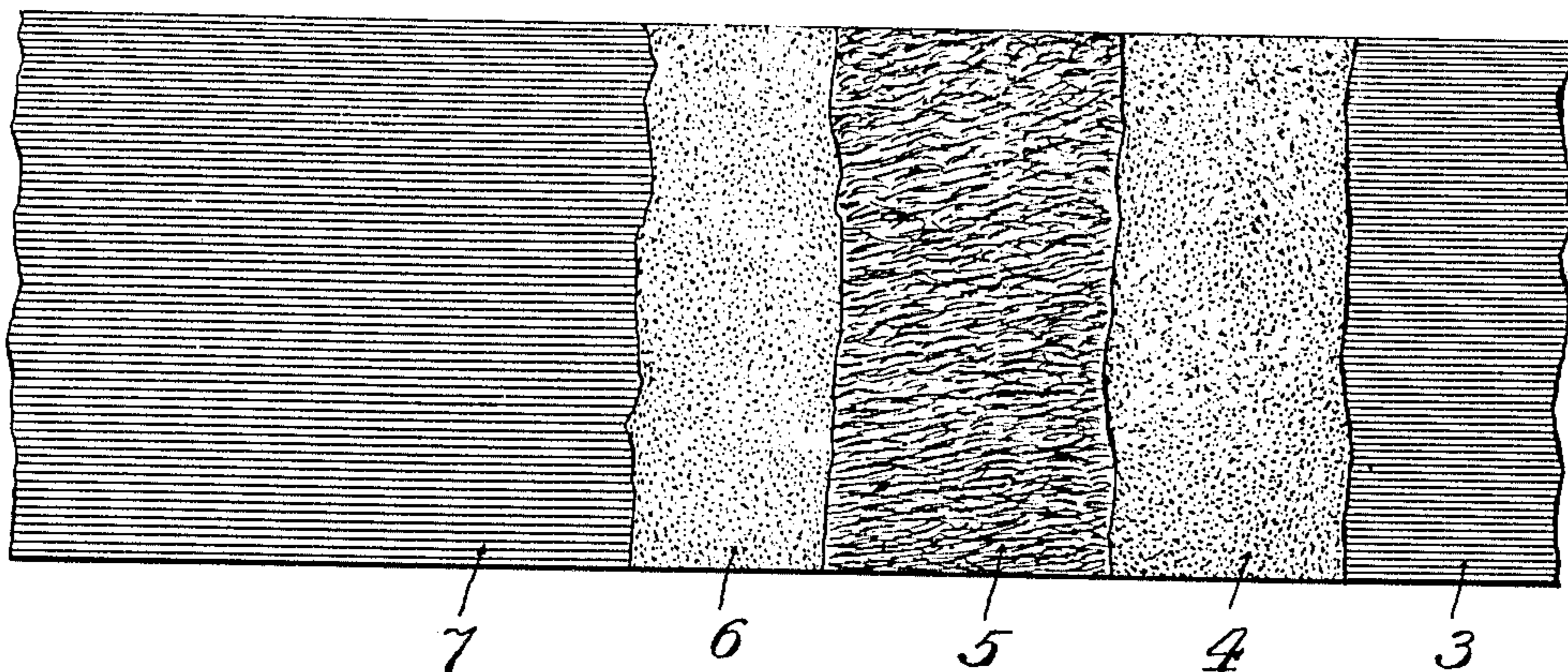
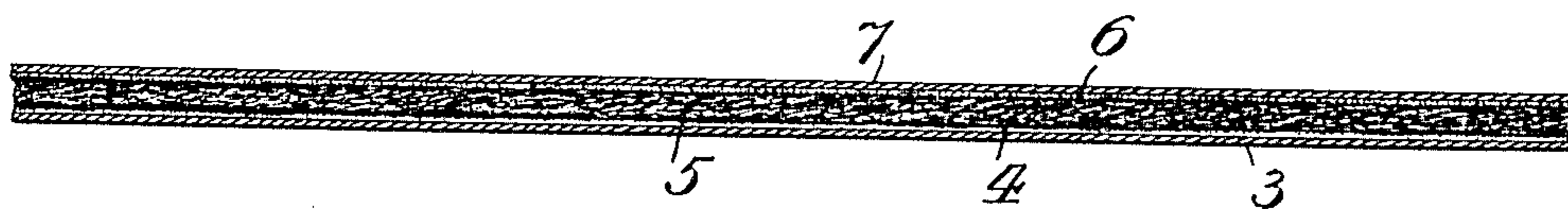


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE A. WRIGHT, OF CHICAGO, ILLINOIS.

BUILT-UP LUMBER-SHEET.

947,508.

Specification of Letters Patent.

Patented Jan. 25, 1910.

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To all whom it may concern:

Be it known that I, GEORGE A. WRIGHT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Built-Up Lumber-Sheets, of which the following is a specification.

My object is to provide a built-up lumber-sheet, more especially for panel-work, and the like, of an improved construction, rendering it particularly strong and durable, free from danger of cracking, checking and warping, as well as comparatively inexpensive to manufacture.

In carrying out my invention I take a thin sheet, or veneer, of wood and apply to one surface thereof a thin coating of a suitable adhesive substance, which may be a mixture formed of liquid glue and fine sawdust, or wood-fiber. Upon the adhesive surface thus provided, I spread a cementatory compound, consisting, preferably, of gypsum and sawdust, or vegetable fiber, to form the filler, or body-portion, of the lumber-sheet. This filler is then given a coating of the same adhesive substance, and a second thin sheet, or veneer, of wood is placed thereon. The built-up sheet thus formed is then subjected to pressure, which is maintained while the filler and adhesive layers dry out and harden.

In the accompanying drawing—Figure 1 is a broken plan view of a built-up lumber-sheet, made in accordance with my invention, and showing the different layers; and Fig. 2, a cross-section of the sheet.

In practice, I prefer to employ a power-press having a bed and follower of the size, at least, of the lumber-sheets to be manufactured. The first veneer 3 is placed upon the bed of the press and coated with a layer 4 of the adhesive substance. The layer of plastic mixture, or filler 5, is spread, as evenly as possible, upon the layer 4 and then coated with a second layer 6 of the adhesive substance. The second veneer 7 is then placed upon the layer 6. A number of lumber-sheets may be built up one upon another

on the bed of the press in the manner described, and all then subjected to pressure at one time. The sheets may be bound together by means of suitable clamping devices before, or immediately after, their removal from the press, to hold them all under pressure until they have become thoroughly dry. In practice, the veneers 3, 7 may be, say, one-twentieth ($1/20$) of an inch in thickness and the layers 4, 6 as thin as practicable, while the thickness of the inner layer, or filler, 5 would depend upon the thickness of the lumber-sheets desired.

I prefer to form the inner layer, or filler, of a mixture of gypsum and sawdust, or wood-fiber, because I thereby form a lumber-sheet having all the advantages above enumerated and which may be sawed, or cut by other means, without injury to the tools employed. Plaster of paris and, in fact, any suitable mineral having cementatory properties, such, for example, as magnesite, hydraulic cement, and the like, may be employed in place of the gypsum mentioned. Likewise, any suitable fibrous, granular or pulverulent material may be employed in place of the sawdust, or wood-fiber, both in the filler and adhesive mixtures, though I prefer, for various reasons, to employ either sawdust or wood-fiber.

What I claim as new and desire to secure by Letters Patent is—

A built-up lumber sheet comprising, in combination, a lower layer of wood veneer, a thin layer of adhesive compound composed of a mixture of liquid glue and fine sawdust imposed on said first layer, a layer of mixed gypsum and wood fiber in a plastic state imposed on said adhesive layer, a second thin layer of adhesive compound imposed on said intermediate layer, and a layer of wood veneer imposed on said second adhesive layer, as set forth.

GEORGE A. WRIGHT.

In presence of—

RALPH SCHAEFER,
R. A. RAYMOND.