

B. E. STRONG & H. G. CLEMENGER.
 MEANS FOR HOLDING SHEET VENEER WHILE BLEACHING.
 APPLICATION FILED DEC. 24, 1914.

1,213,431.

Patented Jan. 23, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

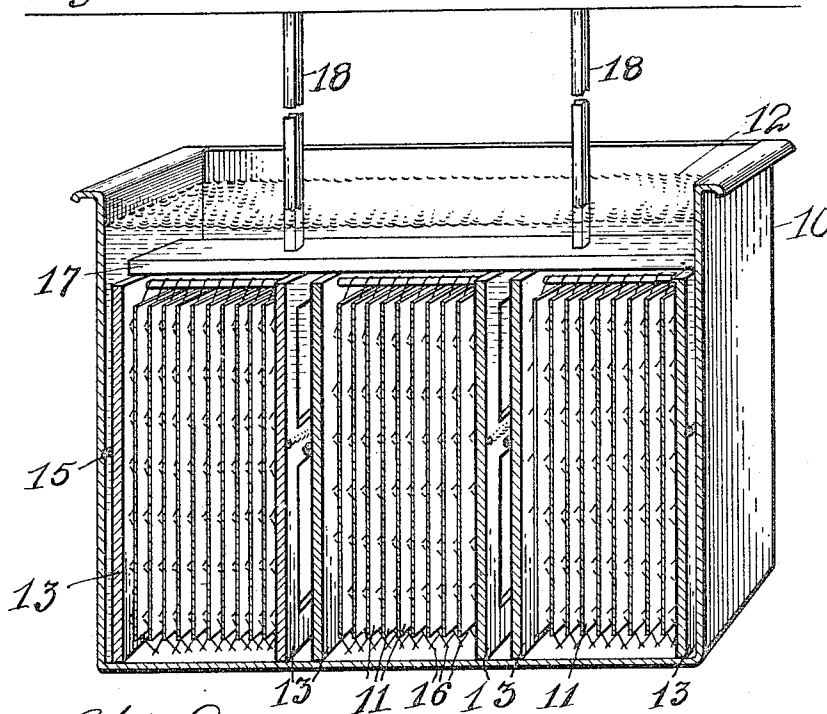
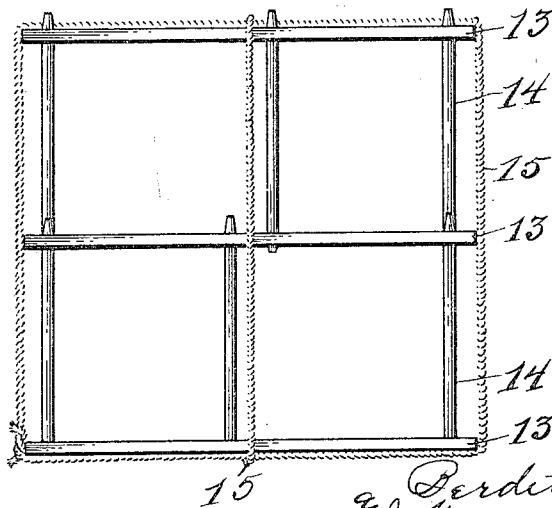


Fig. 2.



Witnesses

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Fig. 3.

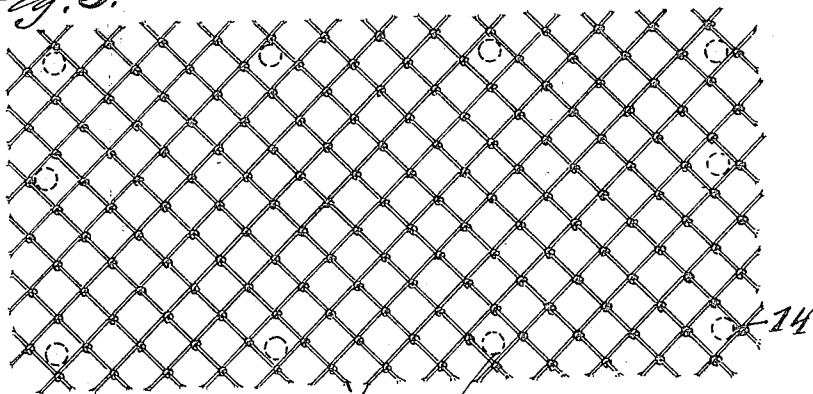


Fig. 4.

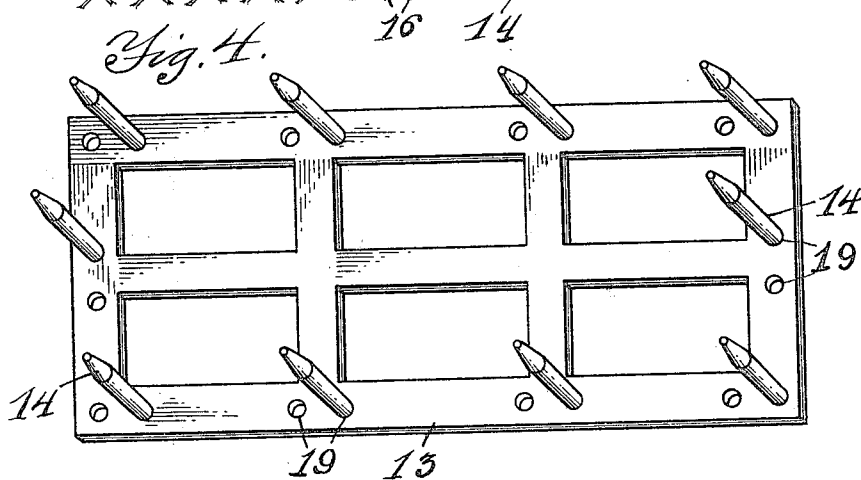
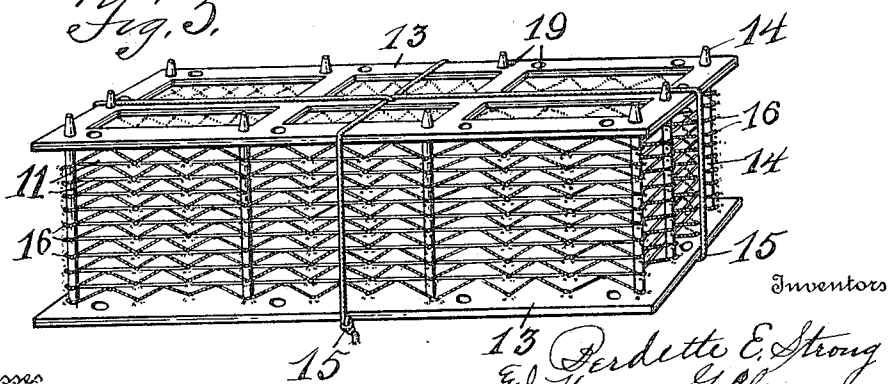


Fig. 5.



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UNITED STATES PATENT OFFICE.

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MEANS FOR HOLDING SHEET-VENEER WHILE BLEACHING.

1,213,431.

Specification of Letters Patent.

Patented Jan. 23, 1917.

Application filed December 24, 1914. Serial No. 878,947.

To all whom it may concern:

Be it known that we, BERDETTE E. STRONG and HARRY G. CLEMENGER, citizens of the United States, residing at the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Means for Holding Sheet-Veneer While Bleaching, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to bleaching wood and particularly thin or easily bendable or warped pieces of wood like sheets of veneer and thin boards; and the object of the improvement is to provide suitable means for holding the sheets of veneer so that they will not warp when placed in the bleaching compound and to provide means in combination with said holding means for separating said sheets of veneer so that they cannot touch one another though bound firmly to one another yet permitting the free circulation of the bleaching compound to both sides of the sheets of veneer during the process of bleaching; and the invention consists in the novel combinations hereinafter set forth and claimed.

In the drawings, Figure 1 is a perspective view of a portion of the bleaching vat with the sheets of veneer bound together yet separated from one another, the sheets of veneer and the vat and binding and separating means being shown in vertical section. Fig. 2 is an end elevation of an empty crate or binding frame as built up for supporting the sheets of veneer. Fig. 3 is a plan view of one of the sheets of netting showing the holding pins of the crate or frame inserted through the mesh of the sheet of netting. Fig. 4 is a perspective view of one of the parts of the crate or frame for supporting the sheets of veneer. Fig. 5 is a perspective view of a filled crate or frame showing the sheets of veneer confined therein with the sheets of netting interposed between said sheets of veneer.

Like characters of reference refer to corresponding parts in the several views.

The numeral 10 designates a bleaching vat which should be of sufficient size to hold the sheets of veneer or thin boards 11 which it is desired to bleach and sufficient of the bleaching compound 12 to cover the veneer when placed in the vat 10.

The sheets of veneer 11 are cut around the

periphery of logs from four to twelve feet in length by turning said logs in a veneer cutting or shaving machine. Accordingly the sheets of veneer are the full length of the log and usually the full cut around the same, often attaining a width of four feet. It is essential that these large sheets of thin veneer should not be permitted to contact with one another in the bleaching compound until the sap or native juices are entirely extracted. Should the sheets of veneer contact with one another before the extraction of the sap they would badly discolor one another at each point of contact, since the chemical action of the bleaching compound upon the wood before the extraction of the sap causes such a discoloration or spotting.

In carrying the invention into practice, a desired number of sheets of veneer 11 are brought into parallel relation with one another and bound in bundle form by means of a crate or frame composed of frame sides 13, which are connected to one another by means of removable pins 14 around the outer edges of the frames 13, a double number of holes 19 being provided along side one another so that a double tier crate may be built up with any of the frames 13, as shown in Fig. 2, when desired. The crate is preferably bound into bundle form by means of a suitable cord or binder 15 which will not discolor in the bleaching compound 12.

The spacing or separating medium employed in combination with the crate to hold the veneer sheets 11 in parallel relation without touching one another consists of a sheet of netting or coarse webbing 16 preferably of suitable textile material such as cotton, seine, twine, silk, hemp, flax, wool, linen or any other suitable textile fabric or fibrous material. This netting 16 should be of a suitable open work character and large enough so as to be easily slipped over the pins 14 as shown, thereby not only holding the sheets separated in combination with the crate but permitting the bleaching solution to reach all portions of the sheets of veneer so that the bleaching action will be uniformly carried out. The absorbent character of the netting insures the subjection of those portions of the sheets of veneer touched by the fabric to the action of the bleaching solution, while the attachment of the netting over the pins 14 insures the complete separation of each sheet of veneer from all other sheets confined in the bundle or in the vat.

It is apparent that the bundle may be easily assembled by placing one of the frames 13 with the pins 14 therein, as shown in Fig. 4; then first a sheet of netting 16 is placed thereon stretching the netting over the pins 14 and letting it lie flat upon the frame side 13. This stretching is easily accomplished by the insertion of the pins 14 through the mesh of the netting 16. A sheet of veneer is then placed upon the netting 16 and another sheet of netting is stretched thereover, the entire crate or frame being filled with alternate sheets of netting and veneer, after which the crate is bound by a cord 15 or other suitable means to thereby hold the netting and veneer firmly in position. The bundle of veneer thus crated is then submerged within the bleaching compound 12 in the vat 10, preferably with the veneer in the vertical position, as shown in Fig. 1. On account of the buoyant quality of the wood the bundle or bundles of veneer have to be held beneath the surface of the bleaching compound 12 preferably by means of a board 17 and standards 18 against an overhead beam or holding means.

It is apparent that the netting or fabric 16 might be bound around the edges by frame work without departing from our invention, but it is preferred that the sheets of netting should be unbound since they are more easily stretched over the pins 14, simple knotted cotton seine being preferred, since the knots form an even space contacting point between the sheets of veneer holding said sheets firmly in place. It is also obvious that cords might be woven around the pins from one to another and form a separating medium. This, however, would not be as cheap or convenient as the use of the netted fabric. The netted fabric is also strong and durable and may be used repeatedly.

We claim as new:

1. Means for holding sheet veneer during bleaching comprising, two frame sides for holding the veneer in line, and removable means for connecting said frame sides near the outer edges to thereby hold the veneer in line between said frame sides.

2. Means for holding sheet veneer during bleaching comprising, two frame sides for holding the veneer in line, pins removably and adjustably connecting said frame sides to hold the veneer therebetween and within

said pins, and means for holding the veneer and frame sides in bundle form.

3. Means for holding sheet veneer during bleaching comprising, frame sides having holes therein near the outer edges, pins removably insertible in said holes to connect said frame sides and hold the veneer in line, and means for binding said frame sides on said pins to inclose the veneer in bundle form.

4. Means for holding sheet veneer during bleaching comprising, frame sides having holes therein around the outer edges, pins removably insertible in said holes to connect said frame sides and hold the veneer in line therebetween, means connectible to said pins for separating the sheets of veneer so that they will not touch one another, and means for binding said frame sides on said pins to inclose the veneer in bundle form.

5. Means for holding sheet veneer during bleaching comprising, frame sides having spaced holes therein around the outer edges, pins removably insertible in said holes to connect said frame sides and hold the veneer in line therebetween, sheets of netting engaging around said pins to separate the sheets of veneer so that they will not touch one another, and a cord for binding said frame sides and netting and veneer in bundle form for submerging in the bleaching solution.

6. Means for holding sheet veneer during bleaching comprising, wooden frame sides having spaced pairs of holes therethrough around their outer edges, pins removably insertible in said holes to build a crate for holding sheet veneer within said frame sides and pins, sheets of fabric netting sufficiently coarse for the insertion of said pins through the mesh thereof to separate the sheets of veneer so that they shall not touch one another in the process of bleaching, and means for holding the assembled frame sides and netting and veneer together for submerging in the bleaching solution.

In testimony whereof we have affixed our signatures in the presence of two witnesses.

BERDETTE E. STRONG.
HARRY G. CLEMENGER.

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