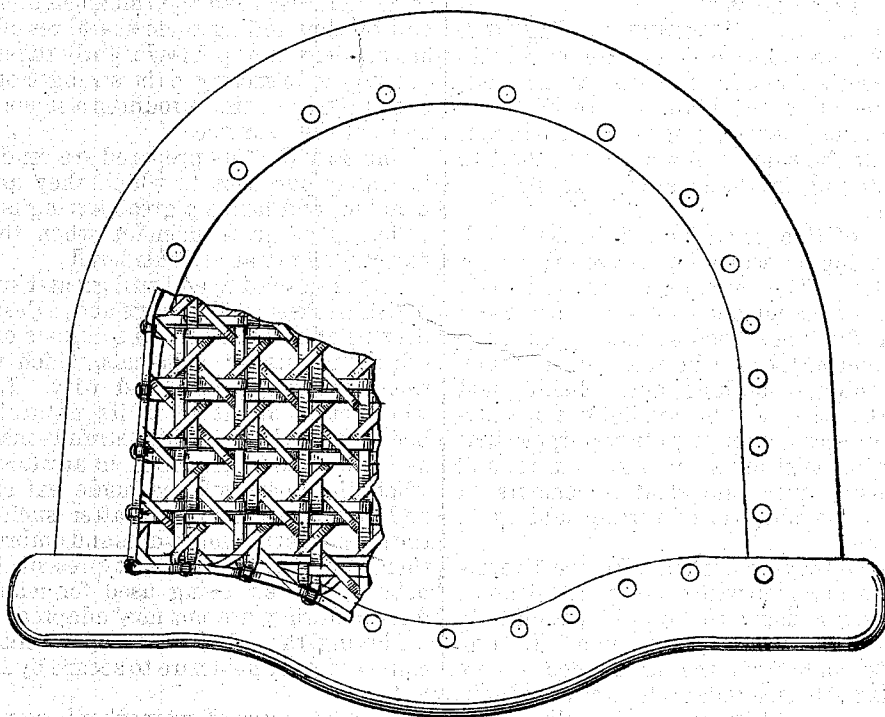


GARDNER A. WATKINS.

Improvement in Preparing Rattan for Chair Seats, etc.

119,099.

Patented Sep. 19, 1871.

Fig 1

Witnesses:

Chas. Nida.
H. L. Wattenberg

Inventor:

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Atty

UNITED STATES PATENT OFFICE.

GARDNER A. WATKINS, OF GARDNER, MASSACHUSETTS.

IMPROVEMENT IN PREPARING RATTAN FOR CHAIR-SEATS, &c.

Specification forming part of Letters Patent No. 119,099, dated September 19, 1871.

To all whom it may concern:

Be it known that I, GARDNER A. WATKINS, of Gardner, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of Cane-Strands; and that the following is a full and exact description of the same, reference being had to the accompanying drawing making a part of this specification.

The object of this invention is to make available for weaving or seating purposes the inner wood of rattan. The invention consists in subjecting to pressure strands or strips of rattan formed from the inner wood of rattan, (after the outer or enamel surface has been removed,) thereby strengthening, smoothing, and polishing said strands so that they will be available for weaving into chair-seats or for any other purpose that the ordinary cane-strands are now put to, and also in infusing into said strands cements or chemicals for the purpose of further adding to their strength.

In the accompanying drawing, Figure 1 represents a chair-seat woven with my prepared strands. This drawing, together with the specification, fully illustrates and describes my invention. Heretofore, strands made from the inner wood or core of rattan has not been available for weaving chair-seats, backs, &c., and its use has been limited to the manufacture of coarser articles of trade, such as baskets. The limited use of such strands has been caused by their want of strength and smoothness of surface, their rough stringy surface not only rendering it extremely difficult to weave them into chair-seats and such like articles of manufacture, but it left a rough and unfinished surface.

To overcome these difficulties and render strands made from the inner wood of rattan equally valuable with the strands made from the outer surface thereof, I pass the strands through polished metal rolls, the space between the rolls being

somewhat less than the thickness of the strands, and by thus rolling them the fibres of the rattan are condensed or pressed tightly together, which not only adds greatly to the strength of the strand but at the same time produces a smooth, uniform, and polished surface.

The strands thus prepared are rendered useful for many purposes to which they are not now adapted, and hence a great saving is produced, which is of great moment when the growing scarcity of rattan is considered.

If it is desired to add still greater strength and polish to the strands I have above described they may be allowed to absorb solutions of shellac or other cements or chemicals, which will render them extremely hard and wiry. In fact, the whole stick of rattan in its natural state and before it has been cut into strands may be rolled, as I have above described, in any desired shape, when the fibers will be made extremely dense and be far better adapted after such rolling for the purpose of making whips and umbrella-springs therefrom than they are at present, besides admitting of their being used for many purposes for which they are not now adapted.

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

1. The process of strengthening and polishing strands formed from the inner wood of rattan by passing the same through rollers and subjecting them to pressure and friction.

2. The process of strengthening and polishing strands formed from the inner wood of rattan by infusing the same in cement or chemicals and subjecting them to pressure and friction.

3. The process of strengthening and forming rattan by means of pressing or rolling the same.

GARDNER A. WATKINS.

Witnesses:

FRANCIS RICHARDSON,
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(35.)