E. E. WHITE.

Machine for Making Splints.

No. 162,730. Patented April 27, 1875.

FIG I

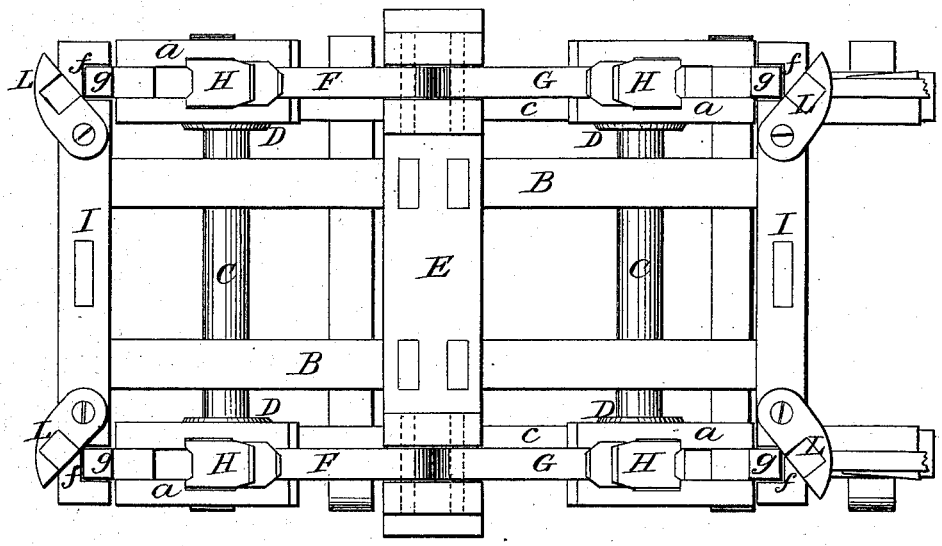
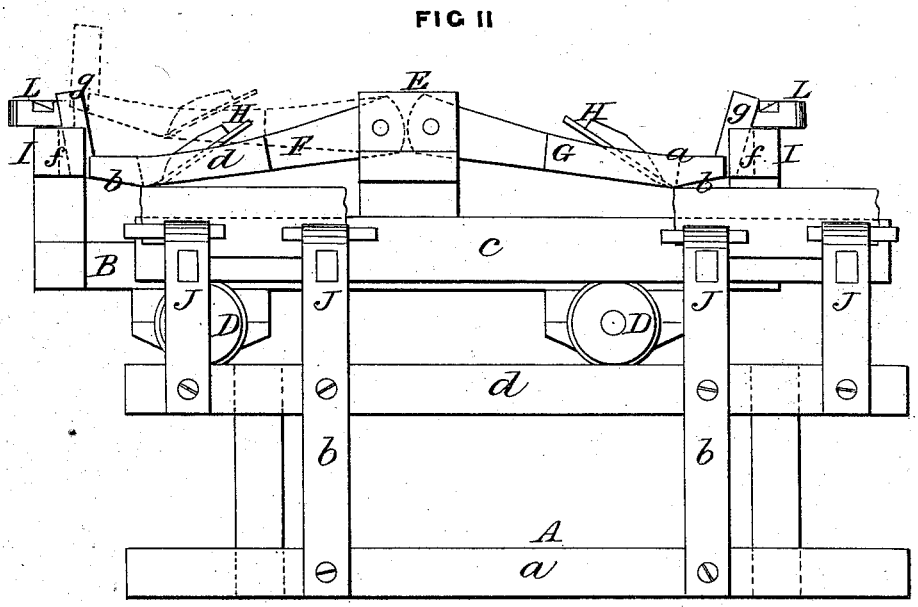



FIG II




WITNESSES

John E. Laing

Jas A. Rutherford

INVENTOR

Edward E. White,

By Johnson and Johnson

his attys.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

# UNITED STATES PATENT OFFICE.

EDWARD E. WHITE, OF OAKLAND CITY, ASSIGNOR OF ONE-HALF HIS RIGHT TO ANCEL B. WHITE, OF LYNNVILLE, INDIANA.

## IMPROVEMENT IN MACHINES FOR MAKING SPLINTS.

Specification forming part of Letters Patent No. **162,730**, dated April 27, 1875; application filed December 10, 1874.

*To all whom it may concern:*

Be it known that I, EDWARD E. WHITE, of Oakland City, in the county of Gibson and State of Indiana, have invented certain new and useful Improvements in Machine for Making Splints; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to furnish a machine for splitting hoops and making chair-splits which shall be simple in construction and effective in operation.

The invention consists in the employment of a reciprocating wheeled carriage, running on ways of a stationary supporting-frame, and carrying cutters or planes, which are arranged in sets at both ends of the carriage, with their pivots in the middle thereof, so as to operate upon the backward and forward movement of the same, to cut hoops or splits from pieces of wood set in clamps at the four corners of the stationary frame.

In the accompanying drawings, Figure 1 represents a plan or top view of a hoop and chair-split machine constructed according to my invention. Fig. 2 is a side elevation of the same.

The base or supporting frame A of the machine is composed of bed-sills *a*, vertical standards *b*, and longitudinal guide-rails *c d*. A reciprocating or sliding carriage or frame, B, fitted between the sides of the stationary frame, is provided with transverse revolving shafts C, which carry wheels or runners D, running between the top and bottom guide rails or ways *c d* of the stationary frame. To a centrally-located transverse beam, E, of the reciprocating carriage are pivoted or hinged two sets of cutters or stocks or holders, F F G G, which extend in opposite directions parallel to each other, and carry cutters or bits, H, similar to those of an ordinary plane. Cross-bars I, located at the ends of the carriage, are provided with gains or grooves *f* in their inner sides, for the reception of vertical guide-arms *g* on the ends of the cutter-stocks, to keep said arms in positions. The two different sets of cutters are designed to be brought into action alternately—that is, when the carriage is moving in action to the right, the left-hand cutters will move out of action over and upon the material, and vice versa. By this means hoops or chair-splits may be cut both upon the forward and backward movement of the carriage, which is an important feature, resulting in the production of a larger amount of finished work by one machine, and with cutters having perfectly unrestrained vertical movement in passing horizontally over the material.

The stuff or wood from which the hoops or splits are to be cut is placed in suitable clamps J, situated at each corner of the stationary frame, so as to hold the material in the line of the movement of the cutter-stocks. The cutters, which are disposed above the wood, cut or shave off thin hoops or splits as the carriage is reciprocated back and forth. The cutter stocks or holders are rendered self-adjusting by reason of their hinged connection being at the end of the arm opposite from the cutters, and thus are free to rise and fall in conformity with, or according to, the wave of the grain of the wood. The cutters will always follow the grain of the wood, and thus it is possible to produce hoops or splits of a uniform size or thickness without waste of wood.

The set of cutter-stocks moving out of action slide back on the material, and are in readiness to cut on their advance movement. In clamping a fresh piece of material in place the pivoted cutter-arms are held in raised positions by means of stops or turn-buttons L on the cross-bars I, as shown by dotted lines in Fig. 2. Said buttons are turned under the vertical guide-arms F of the cutter-stocks for the object stated, and when the proper time arrives they are released, to cause the cutter-holders to drop down upon the wood by their own weight. The free ends of the arms F G are enlarged to form the stocks *a*, and they are beveled on their under sides at *b*, to form a rest upon the material, and to ride gently thereon, to bring the cutters into action, as shown in Fig. 2.

When the cutters are in action they keep with the grain of the wood, and are held upon the material by that action. Their weight, however, serves to keep them down with a sufficient degree to cause them to maintain the split at the same thickness throughout the cut. The mechanism employed for imparting a reciprocating motion to the cutter-carriage is not shown in the present instance, as it forms no part of my invention.

Rack-bars and a shifting-pinion may be employed for the purpose of operating the carriage; but other devices are equally effective.

I claim—

1. In a machine for splitting hoops and making chair-splits, a reciprocating carriage carrying a double set of cutters, operating in the manner herein set forth.

2. The hinged arms G, pivoted at their inner ends, in pairs, to the central cross-beam E, and extending therefrom in the same line, in combination with the guides *f g* for their free ends, substantially as herein shown and described.

In testimony that I claim the foregoing as my own, I have affixed my signature in presence of two witnesses.

EDWARD E. WHITE.

Witnesses:

WILLIAM F. ARMSTRONG,

DANIEL J. HALL.