

C. P. & C. D. CLARK.
Machines for Cutting Splints.

No. 138,378.

Patented April 29, 1873.

Fig. 1.

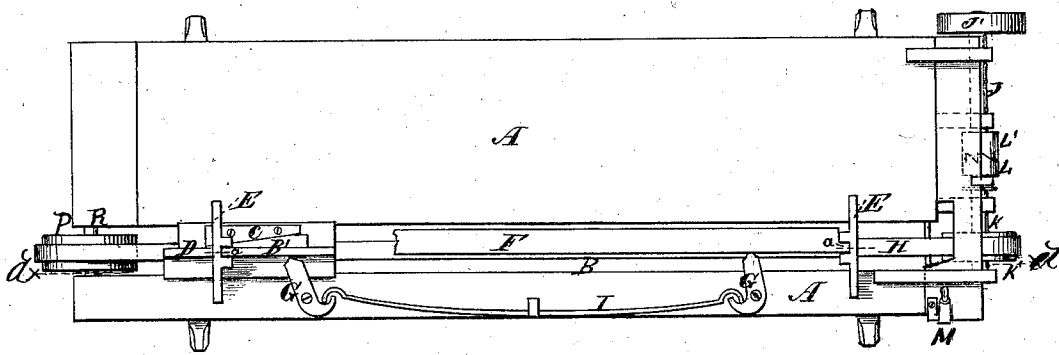


Fig. 2.

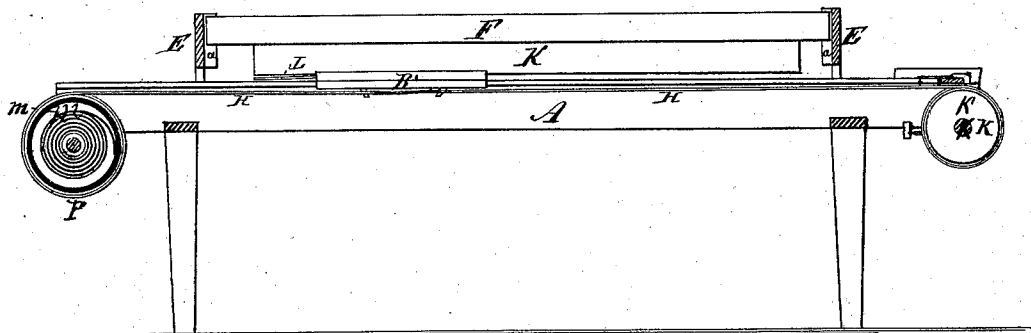
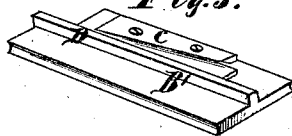


Fig. 3.



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CHARLES P. CLARK AND CHESTER D. CLARK, OF BEAVER DAM, WISCONSIN.

IMPROVEMENT IN MACHINES FOR CUTTING SPLINTS.

Specification forming part of Letters Patent No. **138,378**, dated April 29, 1873; application filed December 13, 1871.

To all whom it may concern:

Be it known that we, CHARLES P. CLARK and CHESTER D. CLARK, of Beaver Dam, in the county of Dodge and State of Wisconsin, have invented certain new and useful Improvements in Machines for Cutting Splints; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which our invention appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a general plan or top view of a splint-cutting machine embodying our said improvement. Fig. 2 is a vertical longitudinal section taken on line *d d* drawn through Fig. 1, showing the operating parts of the machine; and Fig. 3 is an enlarged top view of the block carrying the cutter detached.

Similar letters of reference indicate like parts in the several figures of the drawing.

Our invention relates to that class of machines used for cutting splints for the making of baskets; and the improvement consists in an adjustable block carrying a cutter, which is horizontally arranged oblique to the bolt from which the splint is to be cut, the said block having a reciprocating movement longitudinally with the bolt, whereby the cutter is alternately brought in contact therewith and diagonal to the same, by which means the splint is cut without injury to the grain of the timber. It further consists in the mechanism employed in operating the said cutter, all of which will be more fully understood by the following description.

In the drawing, A represents the frame of the machine, which is substantially made of wood or metal, and in the requisite form to receive the operating parts. The upper surface or bed of the frame is provided with a longitudinal groove or channel, B, within which is loosely fitted an adjustable block, B'. This block is so arranged as to admit of a free and easy movement in the direction of its length within the said channel. D is a guide or way, which is arranged longitudinally at or near the center of the upper surface of the said block, and is permanently secured there-

to. C is the cutter, which is also firmly secured to the upper surface of the said block, and has its cutting-edge arranged at an acute angle to the side of the guide D. Firmly affixed to the upper surface or bed of the frame are uprights E E, which are arranged transversely across the groove or channel B. The said uprights are each provided with a vertical groove, *a*, within which is loosely fitted the ends of the bolt-holder F, the same being so arranged as to admit of a free and easy vertical movement therein. Pivoted to the upper surface of the bed are guides G G, upon which the bolt-holder is supported. Firmly secured to the said bed is a spring, I, the ends of which engage the end of guides G G, as shown in Fig. 1, by which means the said guides are secured in proper position under the bolt-holder. The arrangement of the said guides is such as to be alternately moved from under the said bolt-holder by the contact of guide D as the block recedes or is moved backward, thereby allowing the bolt to drop sufficient for the requisite thickness of splint preparatory to the forward movement of the said block. Secured within suitable boxes affixed to the end of the frame is a shaft, J, upon the end of which is mounted a pulley, J'. Around this pulley is passed a suitable belt, not shown, which communicates with the proper machinery by which a rotating movement is imparted to the said shaft. Loosely fitted upon the said shaft at the end opposite to pulley J' is a hollow mandrel, K, upon which is mounted a wheel, K'. Firmly secured to the end of the said mandrel is a clutch, L, which engages a corresponding clutch, L', permanently affixed to shaft J, by which a rotating movement is imparted to the said mandrel by the rotation of the shaft when the said clutches are engaged. Properly attached to clutch L is a lever, M, by which the said clutches are disengaged when desired. Affixed to and around wheel K' is a belt or strap, H, which extends through the groove or channel B to and around a like wheel, P, which is mounted upon a shaft, R, affixed to the opposite end of the frame. This strap is permanently attached to the lower surface of block B', as shown in Fig. 2. Properly secured with-

in wheel P is a spiral spring, *m*, which is so arranged as to admit of being uncoiled by the rotation of the said wheel.

The operation of our machine is as follows: The bolt being secured within the holder F, motion is imparted to shaft J and mandrel K, by which means strap H is wound around wheel K', thereby moving block B forward bringing cutter C in contact with the end of the bolt, and as the said block is moved forward the cutter passes through the bolt in the direction of its length, thereby forming the splint, and as the cutter passes through the bolt clutches L L' are disengaged by lever M, releasing mandrel K, by which means strap H is wound around wheel P by the recoiling of spring *m*, thereby moving block B' back to

its normal position preparatory to the forward movement of the same.

Having thus described our invention, we claim—

1. The combination of the block B' carrying the cutter C, with the shaft J, mandrel K, clutches L L', wheel K', strap H, wheel P, shaft R, and spring *m*, all arranged as and for the purpose described.

2. The spring I and guides G G, arranged substantially in the manner and for the purpose set forth.

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Witnesses:

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