A. F. SCOW.

Improvement in Machines for Cutting Splints.

No. 115,110. Patented May 23, 1871.

Figs. 1.

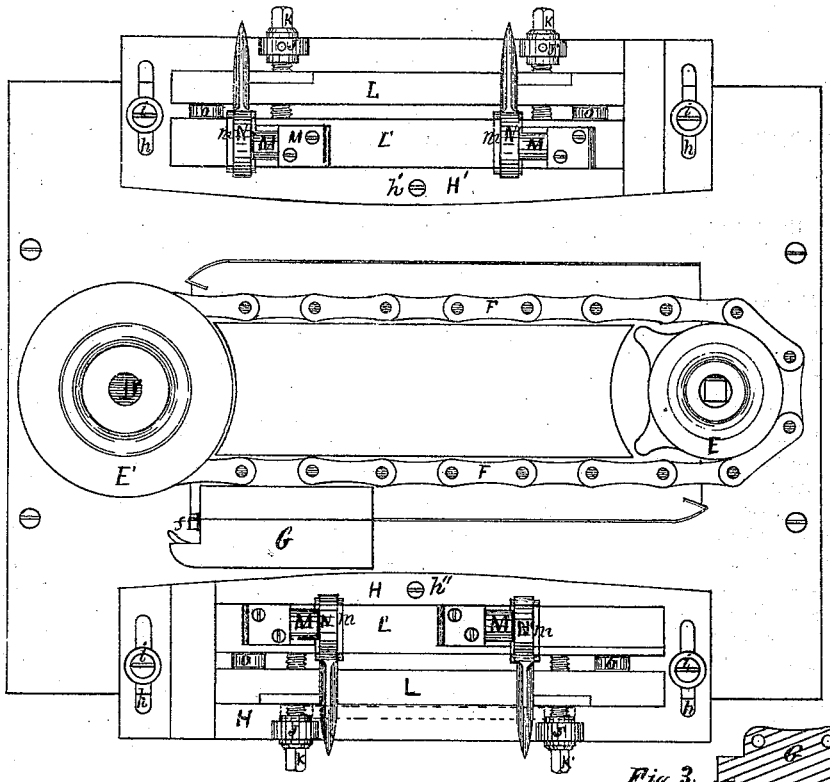


Fig. 3.

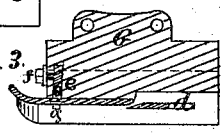
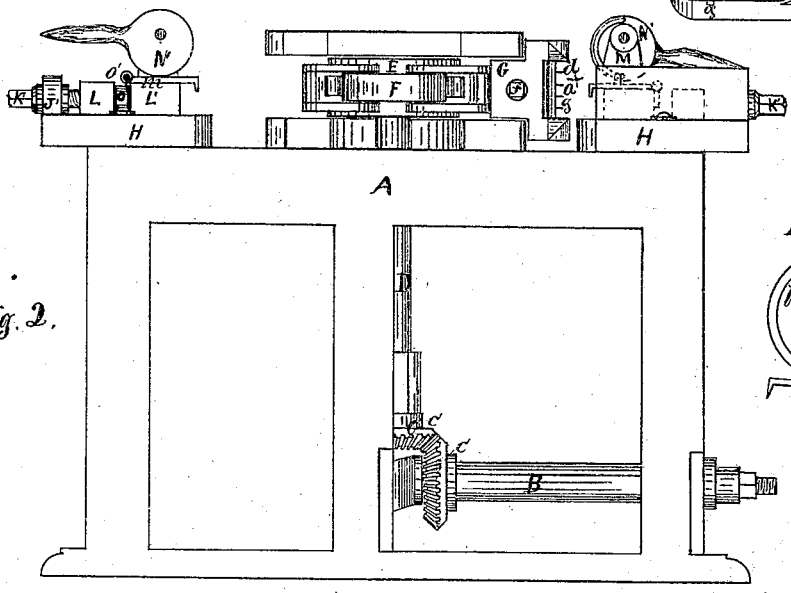
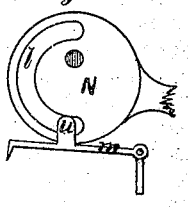


Fig. 2.



Figs. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ANTON F. SCOW, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN MACHINES FOR CUTTING SPLINTS.

Specification forming part of Letters Patent No. 115,110, dated May 23, 1871.

To all whom it may concern:

Be it known that I, ANTON F. SCOW, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new, useful, and Improved Splint-Cutting Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 is a top view of a splint-cutting machine embodying my invention. Fig. 2 is an end elevation of the same. Fig. 3 is a transverse longitudinal section of the cutter-block carrying the cutting-knives, detached; and Fig. 4 is an enlarged detached section of the eccentric and dog employed in holding the timber to be formed or cut into splinters.

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

My invention relates to an improvement in machines for cutting splinters used in the construction of baskets, and its nature will be fully understood from the following description:

In the drawing, A represents the framework of the machine, which may be of wood or metal, or both combined, and of any known form that will receive the operating parts of the machine. B is the main driving-shaft, to which motion is communicated from any suitable machinery having the requisite power, by means of a belt and proper wheels, (not shown in drawing.) C is a gear-wheel which is mounted upon the inner end of shaft B, and engages a corresponding gear-wheel, C′, on the lower end of a vertical shaft, D, which shaft is secured within boxes affixed to the frame of the machine. Firmly affixed upon the upper end of shaft D is a rag-wheel, E, around which is passed a chain-belt, F, extending longitudinally across the upper surface or platform of the machine, to and around a flanged wheel, E′, secured upon a vertical shaft, D′. G is the cutter-block, which is attached to the outer side of said chain-belt F, and which is so arranged as to freely revolve therewith. The said block is provided upon its side opposite to the chain with a longitudinal groove or channel, *a*, which is so arranged as to receive the timber from which the splinters are to be cut as the said block is moved by the rotation of the chain. Firmly secured within said groove or channel, and oblique across the same, is the cutting-tool *d*, which is arranged at the proper distance from the recessed face of the groove to form the graduated thickness of the splinter. Affixed within a mortise cut in and across the forward end of said cutter-block is a marking-tool, *e*, which is firmly secured therein by a set-screw, *f*, passing through the same, and within which tool is secured a series of cutters or knives, *g*, so arranged as to cut the splinters to the proper and graduated width. Pivoted to the upper surface or platform of the machine at *h′ h′*, and on opposite sides thereof, are bed-plates H H′, which are provided at each end with slots or mortises *h h*, through which are passed set-screws *i i*, by which the bed-plates are secured at the proper angle with the cutter-block, the pivoting of said bed-plates to the platform being such as to admit of the same. Firmly affixed to the outer side of said bed-plates, at or near their ends, are vertical uprights J J′, within which are secured screw-threaded shafts K K′, so arranged as to admit of a free-and-easy rotating movement. Secured upon said shafts are the gages, which are made in two parts, L and L′, and so arranged as to be moved toward or from the center of the machine by the rotation of the shafts. Firmly affixed to the parts L′ of the gages are vertical uprights M M′, to which are pivoted eccentric levers N N′, which are provided upon one side with a semi-annular groove, *l*, arranged near and uniformly with the periphery of the eccentric portion of the same. Hinged to the outer side of the parts L′ of the gages are the dogs *m m*, which are each provided with a horizontal pivot, *n*, so arranged as to pass or fit into groove *l* of the eccentric. Thus as said levers are moved upon their fulcrum the dogs are tilted upward or downward, by which means the timber from which the splinters are to be cut is firmly griped upon the bed-plate, and against the inner side of part L′ of the gages. Firmly secured between the two parts of the respective gages, and at opposite ends of the same, are rubber or other elastic springs *o o*, which are so arranged as

to adjust the parts L′ to the proper angle with the cutters, (regard being had to the grain of the timber from which the splinters are to be cut,) the said parts L′ being loosely fitted upon the shafts, which admit of the same.

In using my machine, the timber is placed upon the bed-plate and against the gage; the levers are tilted backward toward the operator, thus forcing the dogs into the timber by the contact of the eccentric, which firmly holds the same in position. A rotating motion is then imparted to the chain by the rotation of the main driving-shaft, which brings the cutters or knives against the end of the timber, forcing the said cutters or knives longitudinally through the timber, thus forming the splinters, as hereinbefore described. To adjust the timber to the cutters or knives preparatory to cutting the splinters a slight rotating movement is imparted to the screw-threaded shafts, by which a uniform and parallel movement is imparted to the gages.

I do not wish to confine myself strictly to the rotation of the screw-threaded shafts, singly, as a chain-belt may be passed around suitable wheels affixed upon the said shafts, as shown by dotted lines, Fig. 1, which will impart the requisite uniform movement.

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

1. The cutter-block G, provided with cutting-knife *d*, marking-tool *e* carrying the cutters *g*, as described, in combination with belt F, the whole arranged substantially as and for the purpose described.

2. The adjustable bed-plate H, in combination with gages L L′, shafts K K′, and springs *o o*, the whole arranged substantially as and for the purpose described.

ANTON F. SCOW.

Witnesses:

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