

(No Model.)

S. OAKMAN.
BASKET SPLINT MACHINE.

No. 304,021.

Patented Aug. 26, 1884.

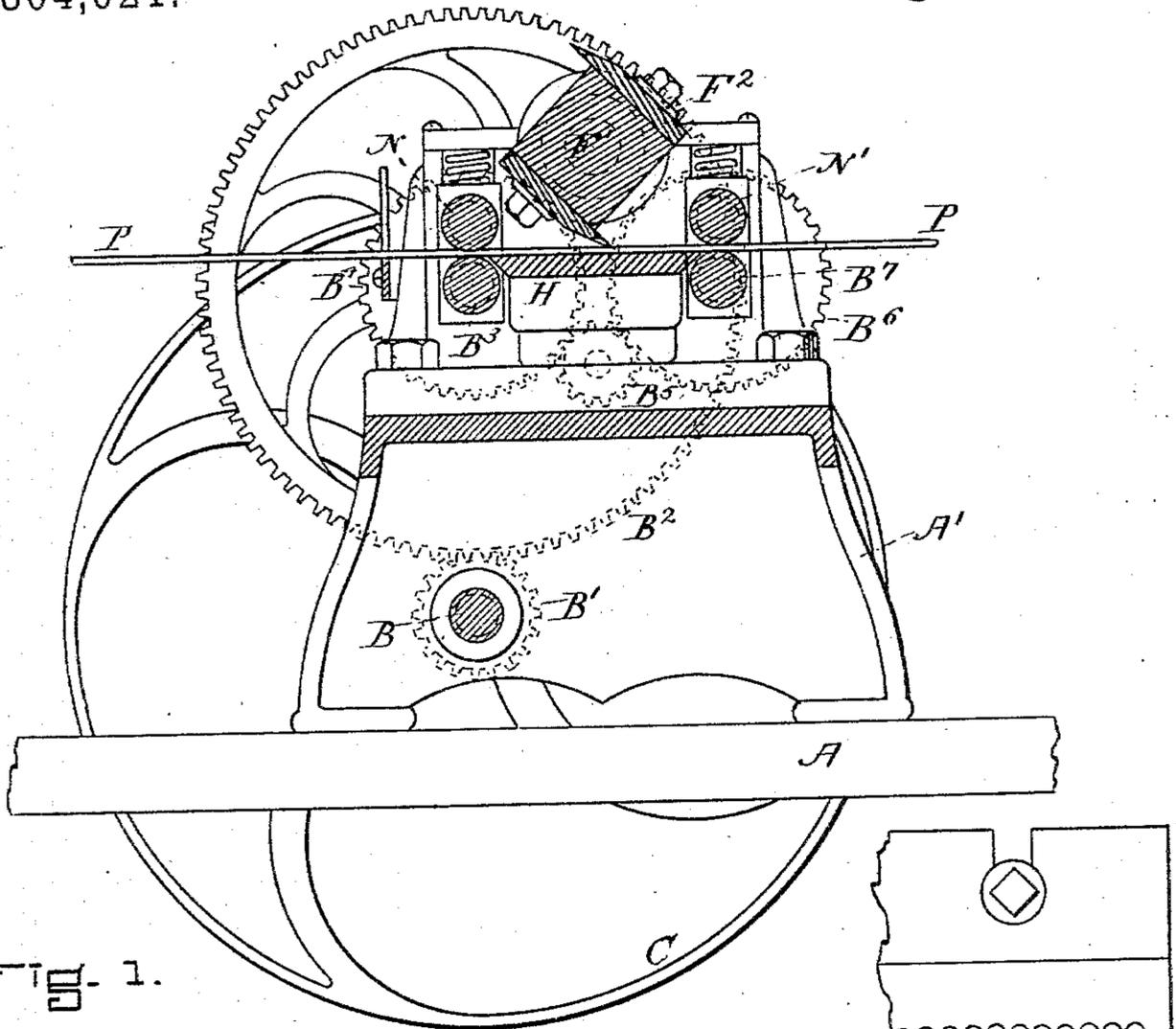


FIG. 1.

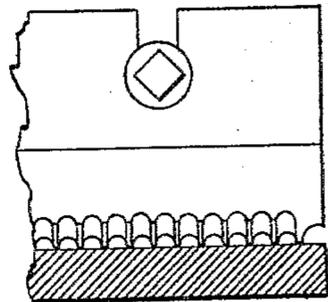


FIG. 3.

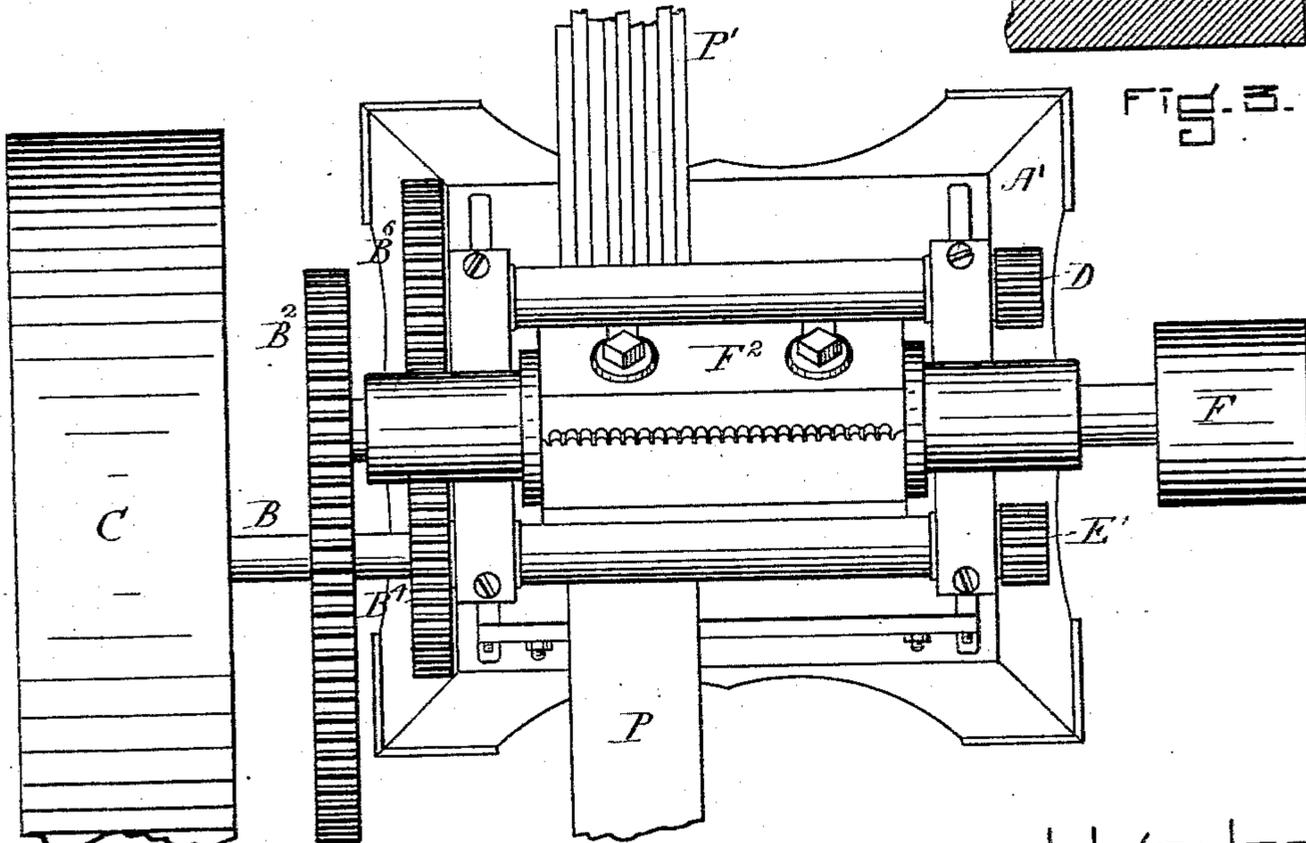


FIG. 2.

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SAMUEL OAKMAN, OF MELROSE, MASSACHUSETTS.

BASKET-SPLINT MACHINE.

SPECIFICATION forming part of Letters Patent No. 304,021, dated August 26, 1884.

Application filed June 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL OAKMAN, of Melrose, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Basket-Splint Machines, of which the following is a specification.

The object of my invention is to so construct the cutter-head and bed-plate that the knives of the cutter-head will mold a flat strip of wood into a series of plano-convex splints and at the same operation separate them, so that when they leave the delivery-rolls of the machine they are finished and ready for use. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of my machine. Fig. 2 is a plan view of the same, and Fig. 3 is a detail.

A, Fig. 1, represents the base, to which the frame A' of the machine is attached.

C, Figs. 1 and 2, is a pulley attached to the shaft B. This pulley operates the feeding-in and withdrawing rolls of the machine. The intermediate mechanism between the shaft B and the actuating-rolls consists of the pinion B', Fig. 1, which operates the large spur-gear wheel B², attached to the lower feed-roll, B³.

Upon the shaft of the lower feed-roll, B³, is attached a spur-gear wheel, B⁴, which, operating through the pinion B⁵, moves the spur-gear B⁶, said spur-gear B⁶ being attached to the shaft of the lower drag-roll, B⁷, and as the gear-wheels B⁴ and B⁶ are of the same diameter the lower feed-roll, B³, and the lower drag-roll, B⁷, will move with the same velocity.

N and N', Fig. 1, represent, respectively, the upper feed-roll and the upper drag-roll. The upper feed-roll, N, and the lower feed-roll, B³, of Fig. 1, are geared together at E', Fig. 2. The upper drag-roll, N', and the lower drag-roll, B⁷, Fig. 1, are geared together at D, Fig. 2, so that both feed and drag rolls move with a uniform velocity.

F', Fig. 1, is a cutter-shaft, to which cutters F² are attached. This cutter-shaft is driven by the pulley F at a velocity very much exceeding that of the feeding motion, so that,

although the cutters act in the same direction that the riven wood P moves, they will mold it into shape. The cutters F² have their cutting-edges shaped as shown in Fig. 3. The points *n* extend so far downward as to come within the nearest contact of the bed H that can be practically maintained without actual contact.

In use I place this piece P of riven wood between the feed-rolls N and B³ of Fig. 1, the said rolls forwarding the wood into the field of action of the cutters F², and thence through the drag-rolls N' and B⁷. As the projecting points *n n* of the cutters F² come infinitesimally near the bed-plate H, the wood P is separated into plano-convex strips, as indicated at P', Fig. 2, ready for use for wicker-work.

I am aware that knives having corrugated cutting-edges have been used in wood-working machines; but I do not know that any organized machine has been made or used for the purpose of molding and severing from thin strips of basket-wood splints completed and ready for use for wicker-work. All other machines for dividing wood into splints or filaments take the same off from thick pieces of wood by knives moving in a plane and not revolving, and the filaments thus severed are not with the grain of the wood, but are more or less "cross-grained." My machine secures filaments with the grain in line—that is, the filament made by my machine is as strong as it is possible to make wood filaments or splints of the required dimensions.

I claim—

In a machine for making wood splints, the combination of the revolving cutter-head F', provided with knives having at their cutting-edges a series of molding members separated by intervening cutting-through members, and the bed-plate H, with the feed-rolls N B³ and drag-rolls N' B⁷, all operating together, substantially as described, and for the purpose set forth.

SAMUEL OAKMAN.

Witnesses:

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