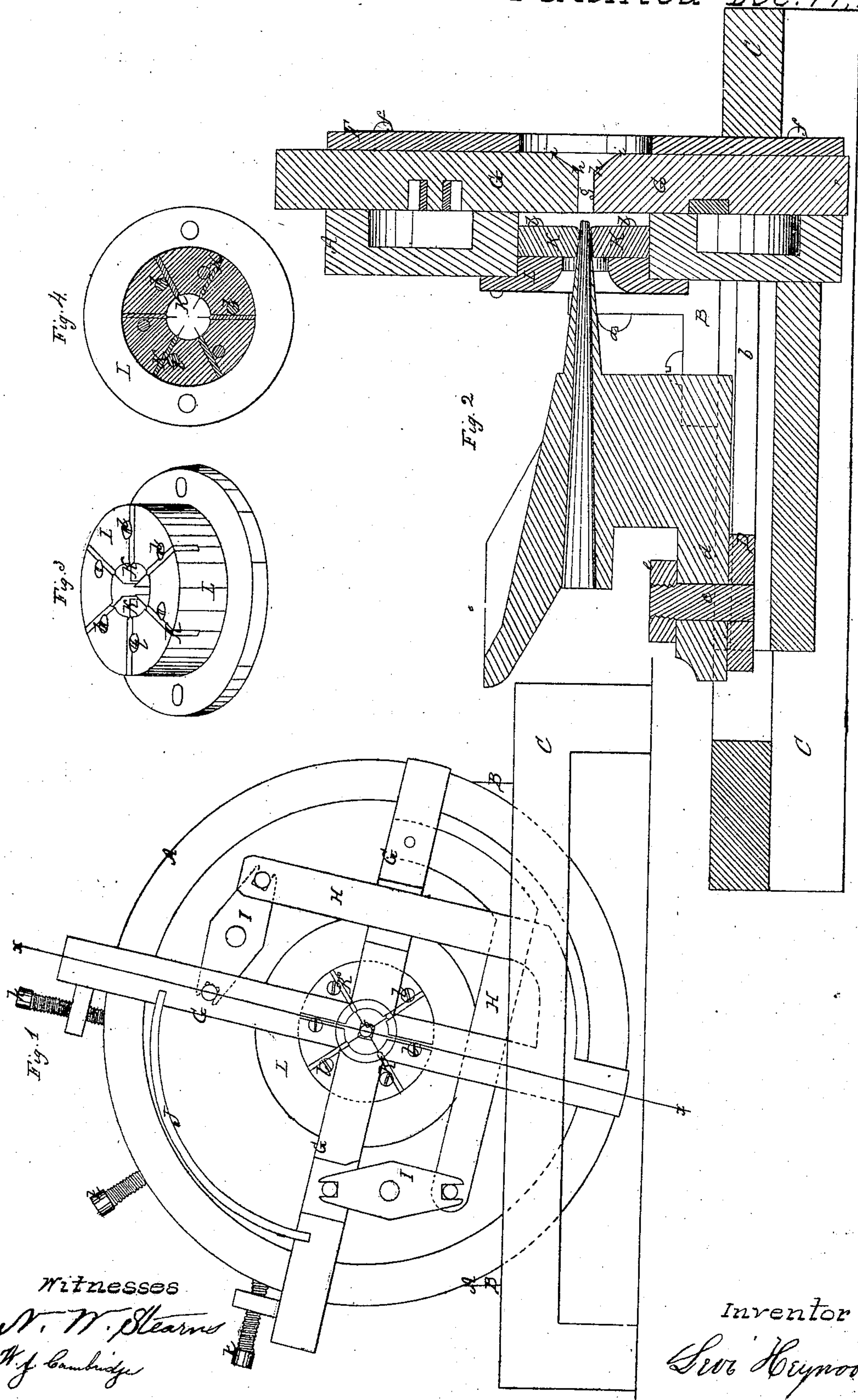


L. Heywood.

Splitting Rattan.

Patented Dec. 17, 1867.

N^o 72291



Witnesses

N. W. Stearns

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Inventor

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LEVI HEYWOOD, OF GARDNER, MASSACHUSETTS.

Letters Patent No. 72,291, dated December 17, 1867.

IMPROVEMENT IN MACHINE FOR SPLITTING RATTAN.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LEVI HEYWOOD, of Gardner, in the county of Worcester, and State of Massachusetts, have invented certain Improvements in Machines for Splitting Rattans, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an end elevation of a machine for splitting rattans, with my improvements applied thereto, the face-plate of the guide-stock being removed, and some of the mechanism represented in red, to better show the relation and construction of the interior mechanism.

Figure 2 is a vertical section on the line $x x$ of fig. 1, with the face-plate secured in place.

Figure 3 is a perspective view of the cutters and the block in which they are adjusted.

Figure 4, a horizontal section through the same.

In machines for splitting rattan where a tubular-spur cutter is employed, owing to the cutters being placed as far forward as the central tube or "quill" through which the pith passes, (the cutters and tube being made in one piece,) the rattan is fed in so as to strike all simultaneously, and the strands yield immediately to the pressure of the "quill" from within, and are turned up so rapidly that the strength of the fibre is injured and the strand frequently fractured.

To overcome the above-mentioned difficulty is the object of my invention, which consists in a series of splitting-cutters, made and adjusted in their block independently of each other, in connection with a "quill" or tube, which may be moved into a position more or less in advance of the cutters, to adapt itself to the different degrees of hardness of the rattan to be split.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, (which represent a portion of a machine for splitting rattan,) A is a head or guide-stock, which is secured at a to standards B, rising from the bed or table C, which is provided with grooved ways b , for a square block, D, to slide therein. This block is provided with a screw-bolt, c , which passes through a circular hole formed in the base, d , of a tube or "quill," E, which, when adjusted in a proper position with respect to the splitting-knives, (to be described hereafter,) is secured in place by means of the screw-nut e , the tube or "quill" serving as a circular cutter, against which the rattan is fed to separate the outer or hard portion from the pith, which is fed through the tube out of the machine. F is the face-plate, screwed at f to the sides of the head A. G are four guide-levers, the outer ends of which pass through slots in the head, while their inner ends lead toward and unite near the centre thereof, and form an aperture, g , for the reception of the rattan, the ends of the levers being bevelled off from h to i to facilitate the operation of entering it. One of each pair of these levers G has an arm, H, which is connected by a short lever, I, to the other lever of the same pair, a bent spring, J, resting upon one lever of each pair and exerting a gradual and proper amount of pressure upon the rattan to bring it into line with the centre of the tube or "quill," and securely hold it in place while being split. k are screws by which the tension of the spring J and degree of pressure of the guide-levers on the rattan are regulated.

The subject which forms the chief feature of my invention will now be described.

K are splitting-knives or cutters, arranged radially within slots in a circular cutter-block, L, one cutter being made adjustable within the slot independently of another, to allow the tube or "quill" to be placed more or less in front of them, according to the size and hardness of the rattan to be split, in order to prevent the strength of the fibre from being injured and the strand from fracturing by being turned up too abruptly, an occurrence common to the employment of the tubular-spur cutter, in which the rattan strikes the tube and cutter simultaneously. When the cutters K are adjusted into the position required, they are confined securely in place by clamping the head of the screws l tightly upon them. When it is desired to adjust the cutters K, or to remove them to be sharpened, it is simply necessary to loosen the screws l , and grind them and their tube or "quill" on a stone, whereas the construction of the tubular cutter is such that a file only can be applied to sharpen the edges, which are consequently made soft to allow of this being done, and the operation of sharpening is thereby frequently repeated.

What I claim as my invention, and desire to secure by Letters Patent, is—

An independent tube or quill, E, which may be adjusted more or less in advance of the cutters, substantially as and for the purpose set forth.

Witnesses:

N. W. STEARNS,
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