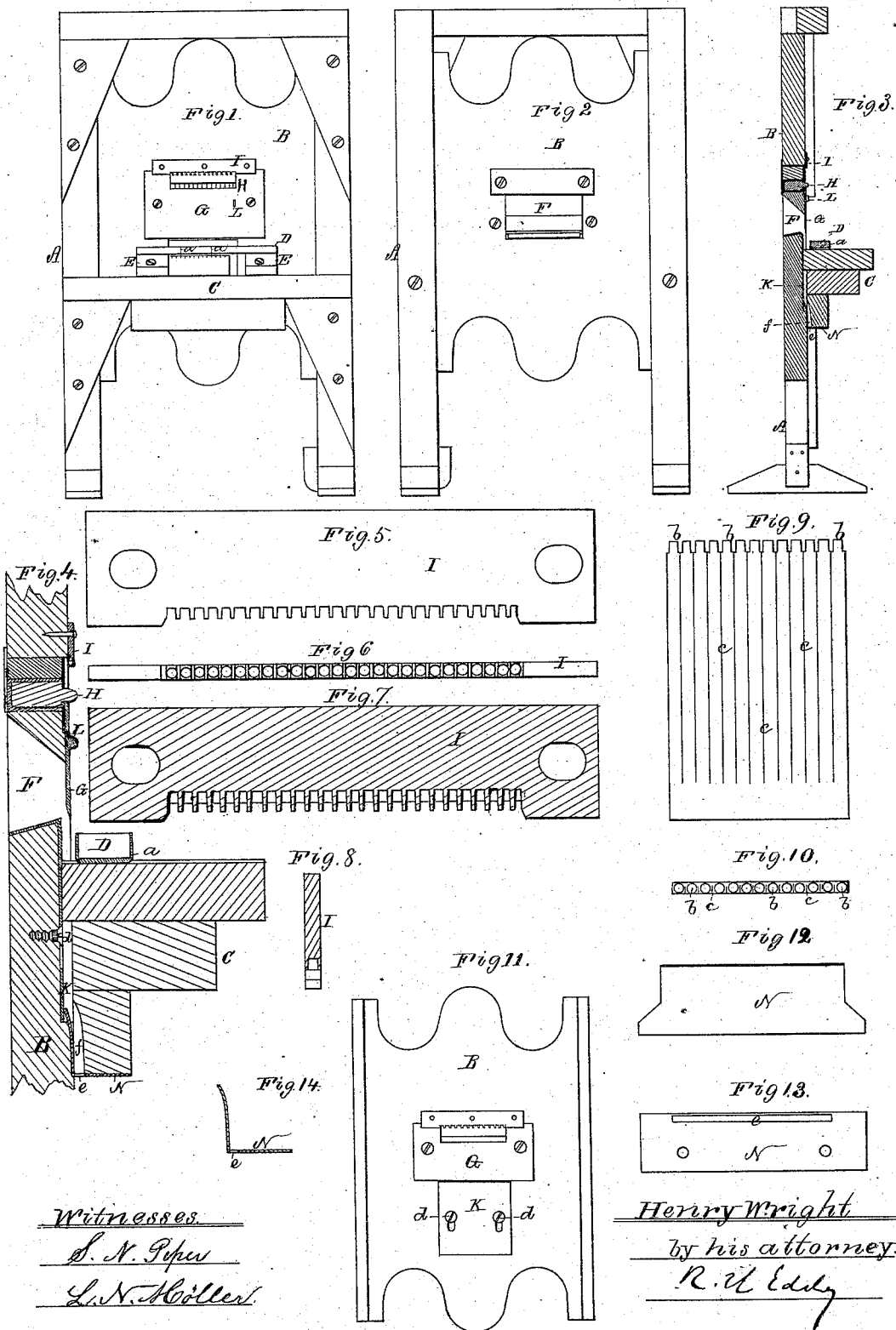


H. WRIGHT.

Machines for Making Match-Splints.

No. 157,665.

Patented Dec. 8, 1874.



Witnesses

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by his attorney.

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UNITED STATES PATENT OFFICE.

HENRY WRIGHT, OF DAMARISCOTTA, MAINE.

IMPROVEMENT IN MACHINES FOR MAKING MATCH-SPLINTS.

Specification forming part of Letters Patent No. **157,665**, dated December 8, 1874; application filed September 16, 1874.

To all whom it may concern:

Be it known that I, HENRY WRIGHT, of Damariscotta, of the county of Lincoln and State of Maine, have invented a new and useful Improvement in Machines for Making Match-Splints; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation, Fig. 2 a rear view, and Fig. 3 a transverse section, of the machine, with the gate at its highest position.

In the said drawings, A denotes a frame, provided with a movable gate, B, the latter being applied to the frame so as to be capable of sliding up and down vertically and rectilinearly therein. Such motions are to be produced by any suitable mechanism or power applied to the gate. The frame has on its front a shelf, C, over which, and parallel to it, is a bar or bridge, D, which rests on two piers, E E, and has projecting down from its bottom two or any other suitable number of parallel guides or ledges, *a a*, each being arranged at right angles with the front edge of the bridge. A block to be reduced to splints is to rest on the shelf, and to pass underneath and be held down by the bridge, the guides or ledges *a a* serving to keep the block square to the gate, and up against one of the bridge-pieces. The gate is provided with a throat, F, made through it laterally, for the discharge of the cards. In front of the throat F is the shear or slicing knife G, having arranged with it, as shown, a series, H, of slitting-knives, which project over and from the slicer, in manner as represented particularly in Fig. 4, which is a vertical section on an enlarged scale of the operative parts adjoining the throat F. Directly over the series H of slitting-knives, and fastened to the gate, is the series of pointers or pointer-bar I, which is shown on an enlarged scale in Figs. 5, 6, 7, and 8; Fig. 5 being a side view, Fig. 6 a lower edge view, Fig. 7 a longitudinal section, and Fig. 8 a transverse section, of such bar, its purpose being to point each splint of each card.

By the term "card" is meant the slitted and pointed slice separated from a block of wood at each downward movement of the gate.

Fig. 9 is a side view, and Fig. 10 an end view, of one of the cards, the points being shown at *b b b*, and the slits at *c c c*. By means of the slitting-knives the card is slit vertically for about two-thirds of its length on the lines *c c c*. Below the slicing-knife, and in front of it a distance equal to the thickness of the slice, is the adjustable throat-piece K, which should be held in place by clamp-screws going through slots in it, they being shown at *d d* in Fig. 11, which is an elevation of the throat-piece as applied to the gate. Furthermore, there projects from the slicing-knife a small cutter or knife, L, whose purpose is to reduce or trim the slices to even widths. There is also fixed to the shelf, or a bracket arranged in manner as shown, a discharger, N, which consists of a plate formed as shown in front view in Fig. 12, in bottom view in Fig. 13, and in vertical section in Fig. 14. The object of the discharger is to support the slice or card after its separation from the block, and effect its discharge through the mouth F. There is on the lower part of the discharger a slot, *e*, for discharging any shavings, chips, or dirt that may gather in the space *f* back of the discharger.

In operating with the machine, a block of wood of suitable size is to be placed on the shelf and against the inner side of the left pier of the bridge. The block next is to be pressed forward up to the plate K, the gate being supposed to be in rapid movement up and down. In descending, the slicing and paring knives will pass entirely through the block, and the slitting-knives will slit it in rear of the removed slice down to the depth required, and the pointing-bar will stamp or cut into it, so as to make the points for the next card or slice, each slice, before being separated from the block, being slitted, pared, and pointed. Immediately after being cut from the block, each card or slice will be expelled from the machine through the throat F.

The object of having the plate K adjustable

vertically is to admit of it being raised as the slicing-knife may become worn up by the process of sharpening it.

To aid the pointers in their operation upon the block, it may be scored or grooved, or have a series of grooves made lengthwise upon its upper surface.

I claim in the said machine as my invention as follows:

1. The slicing, paring, and slitting knives G H L, in combination with the gate B, provided with the throat F and the plate or gage K.

2. The pointing-bar I, and the slicing, paring, and slitting knives G H L, in combina-

tion with the gate B, provided with the throat F and the gage K.

3. The slotted discharger N, as described, in combination with the stationary shelf C, and with the gate B, provided with the knives G H and adjustable gage K, as set forth.

4. The bridge D, provided with one or more of the guides *a a*, in combination with the shelf C and with the gate B, provided with the slicing and slitting knives.

HENRY WRIGHT.

Witnesses:

R. H. EDDY,

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