D. WARNER.

Whalebone Splitting Machines.

No. 145,770. Patented Dec. 23, 1873.

Fig. 1.

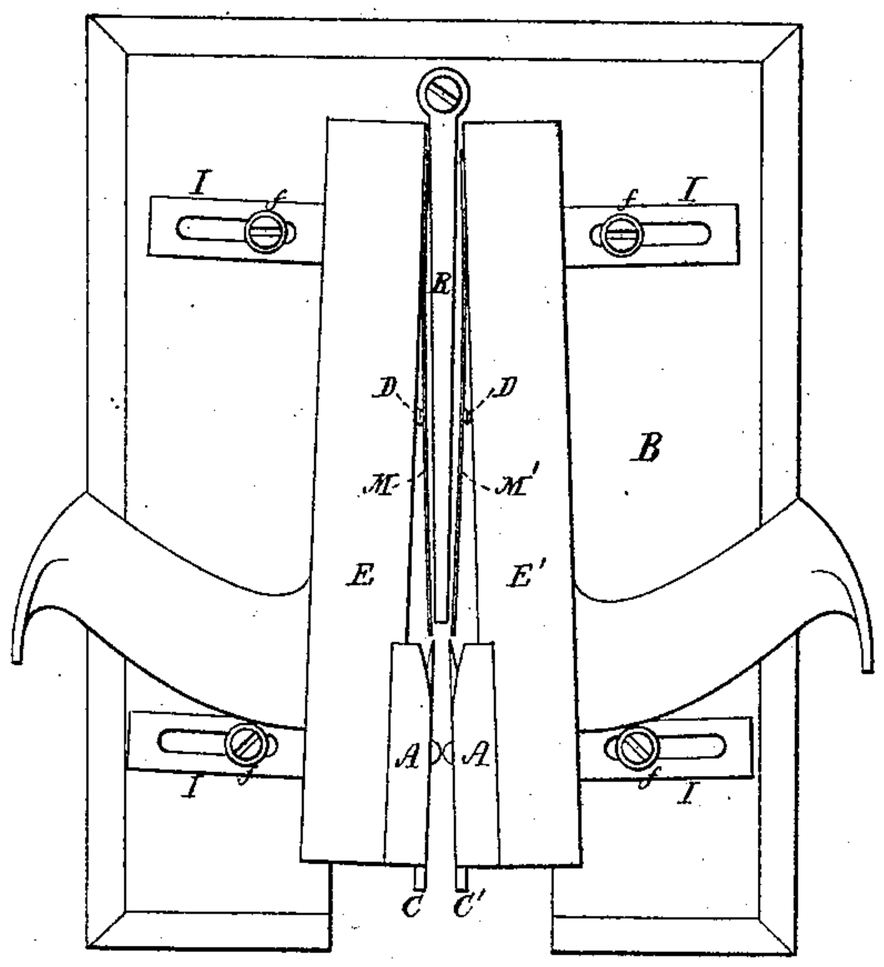


Fig. 2.

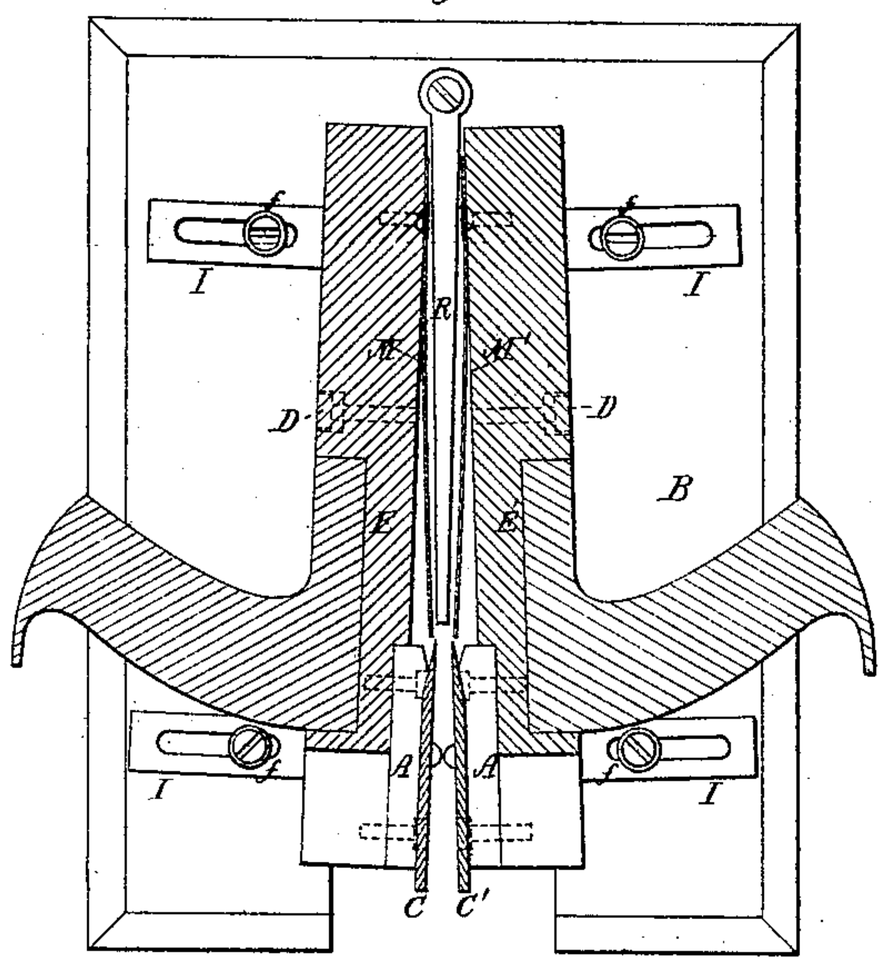
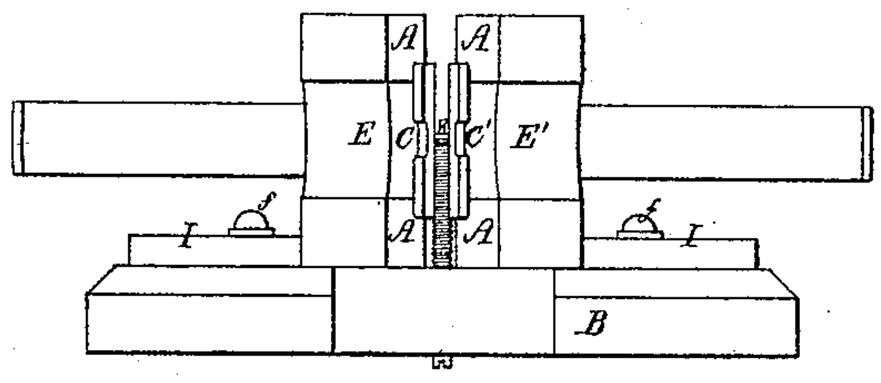


Fig. 3.



Witnesses.
S. W Piper.
L. N. Mollen

Daniel Warner.
by his attorney.
R. H. Eddy

UNITED STATES PATENT OFFICE

DANIEL WARNER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO JAMES A. SEVEY, OF SAME PLACE.

IMPROVEMENT IN WHALEBONE-SPLITTING MACHINES.

Specification forming part of Letters Patent No. **145,770**, dated December 23, 1873; application filed November 26, 1873.

To all whom it may concern:

Be it known that I, DANIEL WARNER, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Whalebone-Splitting Machines; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a horizontal and longitudinal section, and Fig. 3 an end elevation, of said machine.

On December 28, 1869, Letters Patent No. 98,305 were granted to James A. Sevey for an improvement in planes for shaving whalebone. In carrying out my invention I employ two of such planes, each having a plane-stock, a cutter or plane-iron, and a spring or elastic throat-piece, provided with adjusting-screws, except that I dispense with the front adjusting-screws of each throat-piece. Furthermore, these plane-stocks I arrange with their bottoms parallel and at a suitable distance apart, and I secure the said stocks to a bed by clamps or devices, particularly such as will admit of the distance of the two stocks from each other being adjusted as occasion may require. Furthermore, I arrange between the two stocks, and upon the bed, a tongue guide or rest, (shown at R,) for supporting the piece of whalebone to be reduced, and while in the act of being cut or split on its two opposite sides at once, so as to be reduced to an even thickness.

In the drawings, B denotes the bed; E and E′, the two plane-stocks. M M′ are the springs or elastic throats; C C′, the plane-irons or cutters, and A A A A the plane-iron supporters. Each of the elastic throats, secured at or near its rear end to the plane-stock by screws going through slots in the throat-piece, rests against one or two screws, D, which screw through the plane-stock in advance of the connection-screws and against the throat-piece. In fact, each of the planes is to be exactly like that described in said Sevey's patent, except in having omitted or being without the forward adjusting-screws of the throat-piece. Each plane-stock has two slotted arms, I I, projecting from it and resting on the bed. Screws *f f* go through the arms and screw into the bed, such arms and screws serving to clamp the plane-stock to the bed.

In using this machine, a strip of whalebone, tapering or of uneven width, to be reduced to one of an even width or thickness, and to two others, each tapering from heel to toe, is to be placed upon the guide-rest R between the two planes, and next is to be pushed, smaller end foremost, between the two elastic throat-pieces and the cutting-edges of the two plane-irons. The smaller end of the piece of whalebone is next to be seized and the piece drawn forward. While the strip of whalebone is thus being so pulled through the machine, the plane-irons will reduce it to an even width by simultaneously splitting it in its opposite sides, the elastic throat-pieces not only holding it in its due relation with the knives, but springing away and accommodating themselves to it as it may increase in thickness from toe to heel. The strip will thus be reduced to three strips, the middle one being generally of equal width, and the others being tapering.

I would remark that my machine is not for stripping, planing, or shaving a piece of whalebone on one side by a series of cuts made successively, as is the case with a single Sevey plane, as ordinarily used; but when two of such planes are arranged and employed, as described, the elastic throat-piece of one co-operates with that of the other, and both operate with the two cutters in a manner to produce very different results, viz., the splitting of the tapering piece of whalebone into three distinct pieces, one of which being generally of an even width nearly throughout its length, and the others being tapering from heel to toe. The springs, by grasping and holding the strip on its two opposite sides, enable it to work laterally as its grain may require, and thus it becomes split "with its grain," and not across such, so as to be liable while in use to peel or sliver.

I claim as my invention—

The two plane-stocks E E′, cutters C C′, springs or throat-pieces M M′, and the guide-tongue R, arranged in manner and fixed upon a base or bed, B, so as to operate as and for the purpose substantially as described.

DANIEL WARNER.

Witnesses:
R. H. EDDY,
S. N. PIPER.