N. Goddard,

Splitting Whalebone.

No. 70,545. Patented Nov. 5, 1867.

Fig. 3.

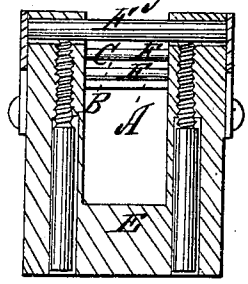


Fig. 1.

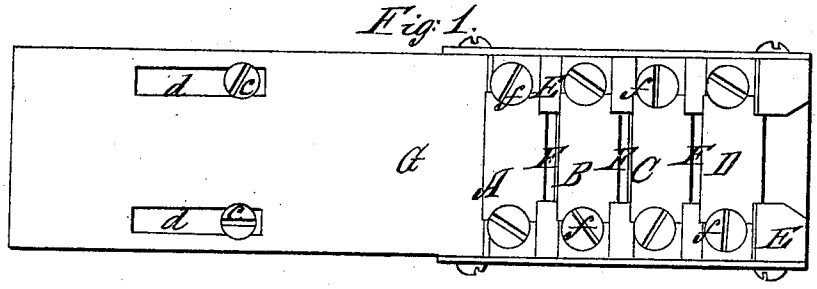
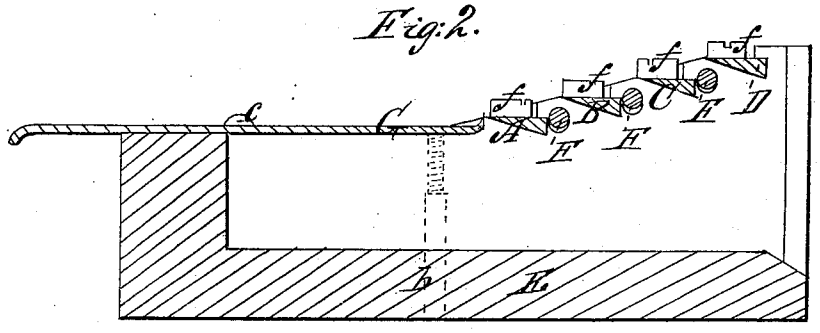


Fig. 2.



Witnesses:

S. N. Piper.

H. P. Hale Jr.

Inventor:

Nathan Goddard

by his attorney

R. M. Eddy

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

United States Patent Office.

NATHAN GODDARD, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 70,545, *dated November* 5, 1867.

IMPROVEMENT IN MACHINES FOR SPLITTING WHALEBONE.

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

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, NATHAN GODDARD, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Machinery for Reducing Whalebone, Wood, or Various Other Materials, to Strips; 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

Figure 2 a longitudinal section of the invention.

Figure 3 will be hereinafter described.

In such drawings, A B C D denote a series of knives, arranged, with respect to each other, like the treads of stairs, and fastened by clamp-screws *f f* to a trough or frame, E. In front of and below the cutting edge of each of the said knives except the lowermost one, is a small roller, F, provided with adjusting-screws, by which it may be moved vertically toward the cutting edge of the knife.

Fig. 3, which is a transverse section taken through the roller and its adjusting-screws, exhibits the application of the latter to the frame E and the roller.

The lowermost of these knives or cutters has in front of it an adjustable plate or throat-piece, G, so applied to the frame E as to extend a short distance underneath the cutting edge of the knife, and be capable of being adjusted to a greater or less distance therefrom, as occasion may require. Adjusting-screws *b*, screwed in the frame and against the plate, serve to regulate its vertical distance from the knife, its horizontal distance therefrom being effected by moving it in the frame E, and clamping it thereto by screws *c c*, screwed into the frame, and going through slots *d d* made in the plate.

By crowding a piece of whalebone horizontally against the knives, it will be caused to raise each of the rollers in succession, and be split by the knives. The roller, operating with the knives between which it may be placed, will facilitate the splitting of the stick by the rear knife of the two. Besides, the said roller, by being adjustable with respect to the knife over it, serves to regulate the thickness of the strip removed by the knife. And as each roller can revolve on its axis, the passage of the strip under the knife will be facilitated thereby.

I claim the arrangement and combination of the series of knives A B C D and adjustable rollers F, or the same and the adjustable throat-piece G, the whole being applied to a frame, E, substantially as and for the purpose specified.

NATHAN GODDARD.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.