

H. B. CHESS.  
Nail-Separating Devices.

No. 145,720.

Patented Dec. 23, 1873.

Fig. 1.

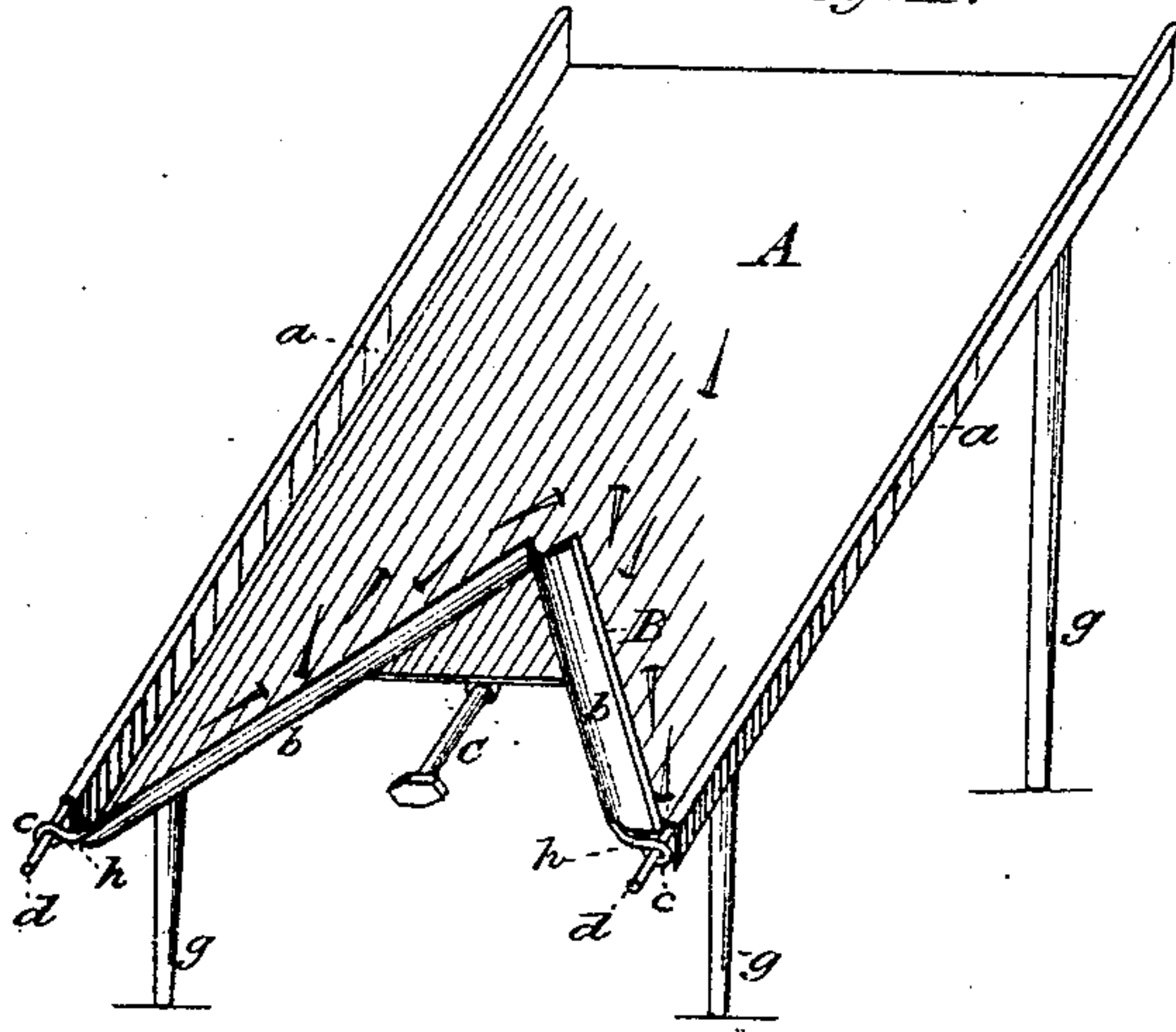


Fig. 2.

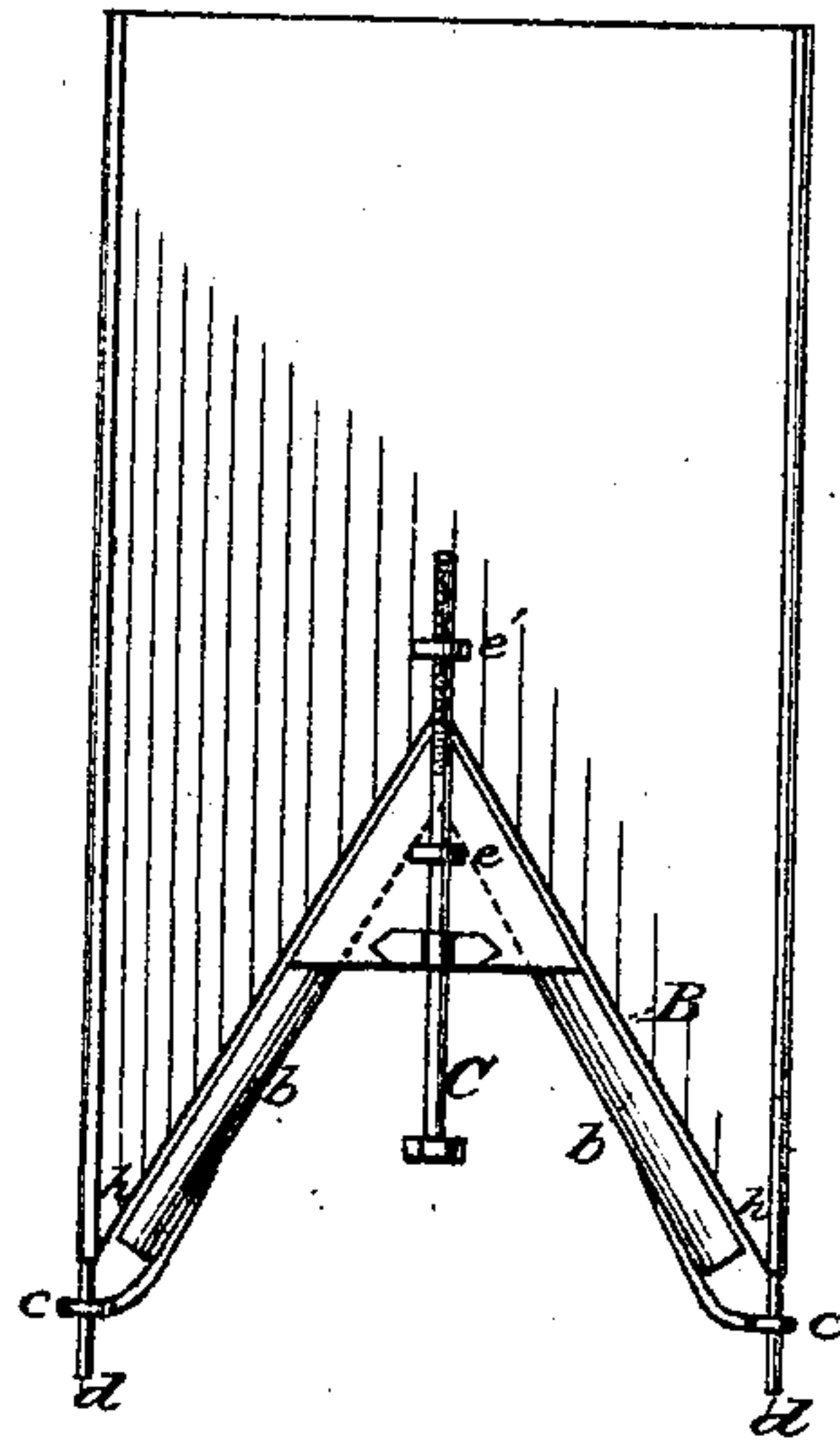


Fig. 3.

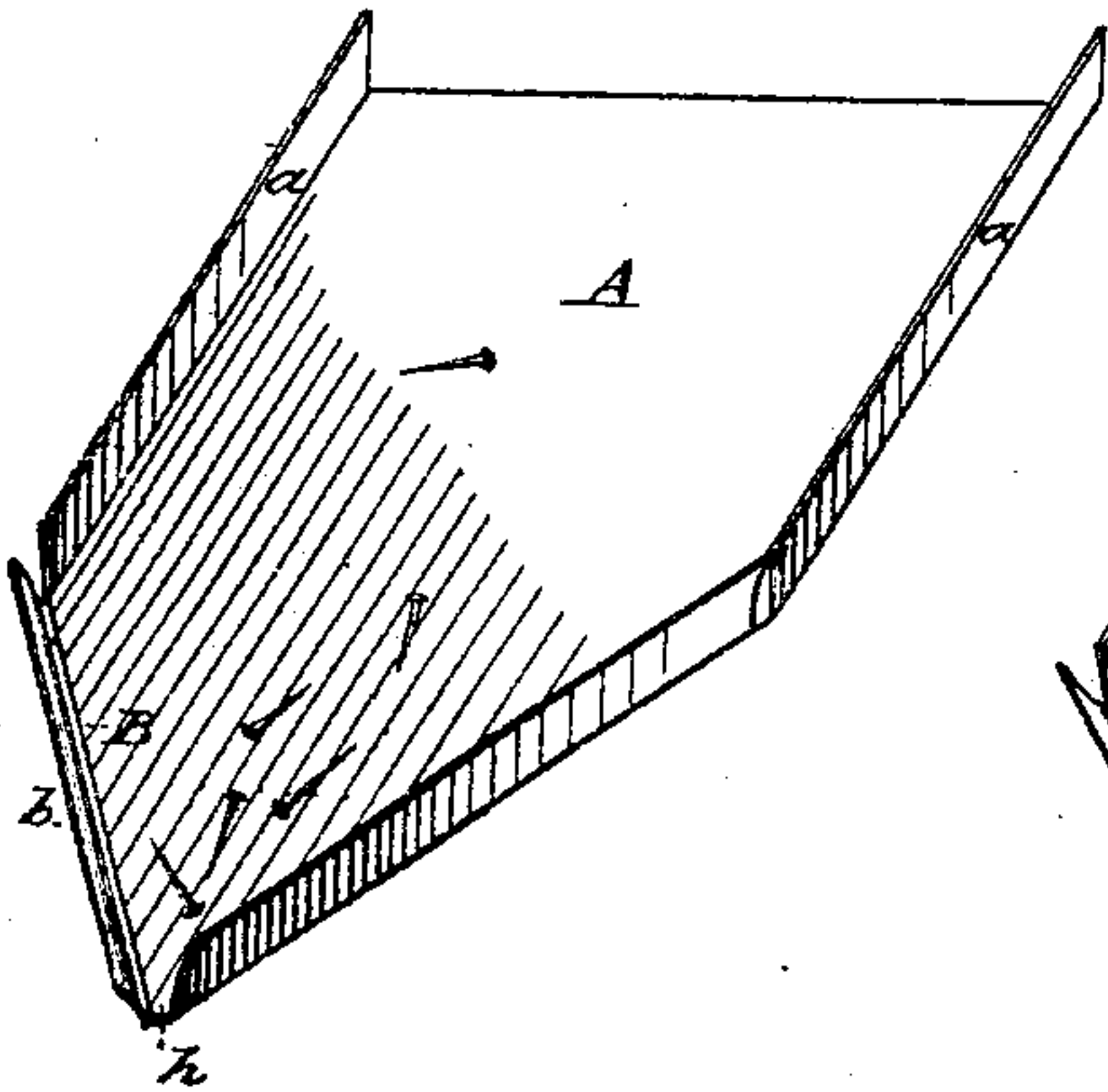
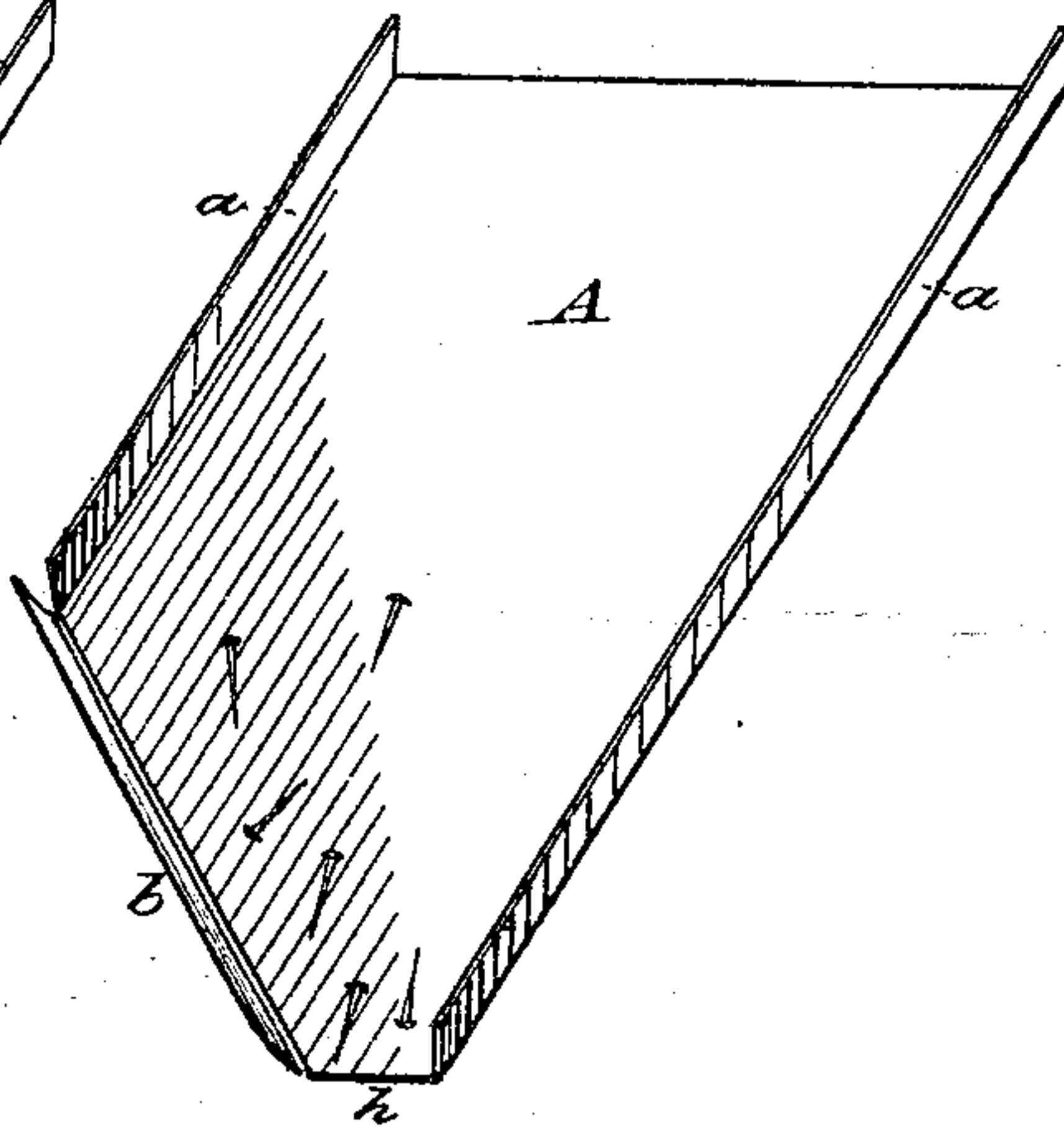


Fig. 4.



Witnesses:

J. C. Brecht,  
E. C. Hodges.

Inventor:

Harvey B. Chess

by  
A. H. & R. K. Evans

his Atty.

# UNITED STATES PATENT OFFICE.

HARVEY B. CHESS, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN NAIL-SEPARATING DEVICES.

Specification forming part of Letters Patent No. 145,720, dated December 23, 1873; application filed December 9, 1873.

*To all whom it may concern:*

Be it known that I, HARVEY B. CHESS, of Pittsburg, Pennsylvania, have invented a new and Improved Device for Sifting Nails and Tacks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a view of the bottom or under side. Figs. 3 and 4 are modifications of the form of my device.

My invention relates to that class of devices used by nail and tack manufacturers for the purpose of sifting the nails or tacks, in order to remove from their goods all imperfect ones, as well as all dust and scale, which consumers have sometimes to pay for at the price of proper product per pound; and it consists of the combination and arrangement of the parts hereinafter described.

In the drawings, A represents an inclined flat spout or trough, down which the nails or tacks pass from the machine to their receptacle. The sides of this trough *a a* may be constructed at a right angle to the plane of the trough, or they may be made with any desired curve or incline.

It is known that in the manufacture of nails and tacks much refuse matter in the way of imperfect goods necessarily follows the process of making, and frequently slivers and parallel cuts are made.

The purpose of my device is to remove this and other refuse matter, and, hence, at the lower end of the spout A I cut out a piece, so as to leave an angular slot or opening, B, and secure therein a dam or breast, *b*, having a corresponding angle. This dam is made adjustable by means of the screw C, as shown in Fig. 2, its outer ends or wings being secured by sliding hooks *c c* sliding on the rods *d d* projecting from the sides *a a*. These wings may be made curved or plane faced, as

desired. Projections *e e'*, Fig. 2, hold the adjusting-screw C in position, and *e'* has a female screw, into which fits the screw C, and thus affords the means of adjustment. By turning this screw, the distance between the end of the spout and the dam *b* is increased or lessened at pleasure. The legs *g g* sustain the spout; but any other convenient means may be adopted to accomplish the same purpose.

The operation of my device is as follows: The spout is placed under the machine and the nails or tacks are caught on its incline flat surface and carried down until they reach the dam *b*, when all the refuse passes off through narrow openings on either side, while the perfect goods with proper heads, being too large to pass through the opening, continue along the base of the dam to the openings *h h*, and are there allowed to fall into the receptacle prepared for receiving them.

I am aware the screens have been made with parallel longitudinal grooves to receive the nails, the grooves made adjustable laterally by means of screws; but grooves retard greatly the passage of the nails from the machine to the receptacle and scatter the refuse. I avoid this objection by means of my flat chute and arresting the refuse and dirt at the dam *b*.

Having thus explained my invention, what I claim as new, and desire to secure by Letters Patent, is—

A device for sifting nails and tacks, consisting of the flat-bottom spout A, with its sides *a a*, in combination with the angular dam or breast *b*, adjusting-screw C, sliding hooks *c c*, and rods *d d*, all constructed and arranged substantially as and for the purpose set forth.

HARVEY B. CHESS.

Witnesses:

DAVID J. MCGARY,  
WM. C. CHARLTON.