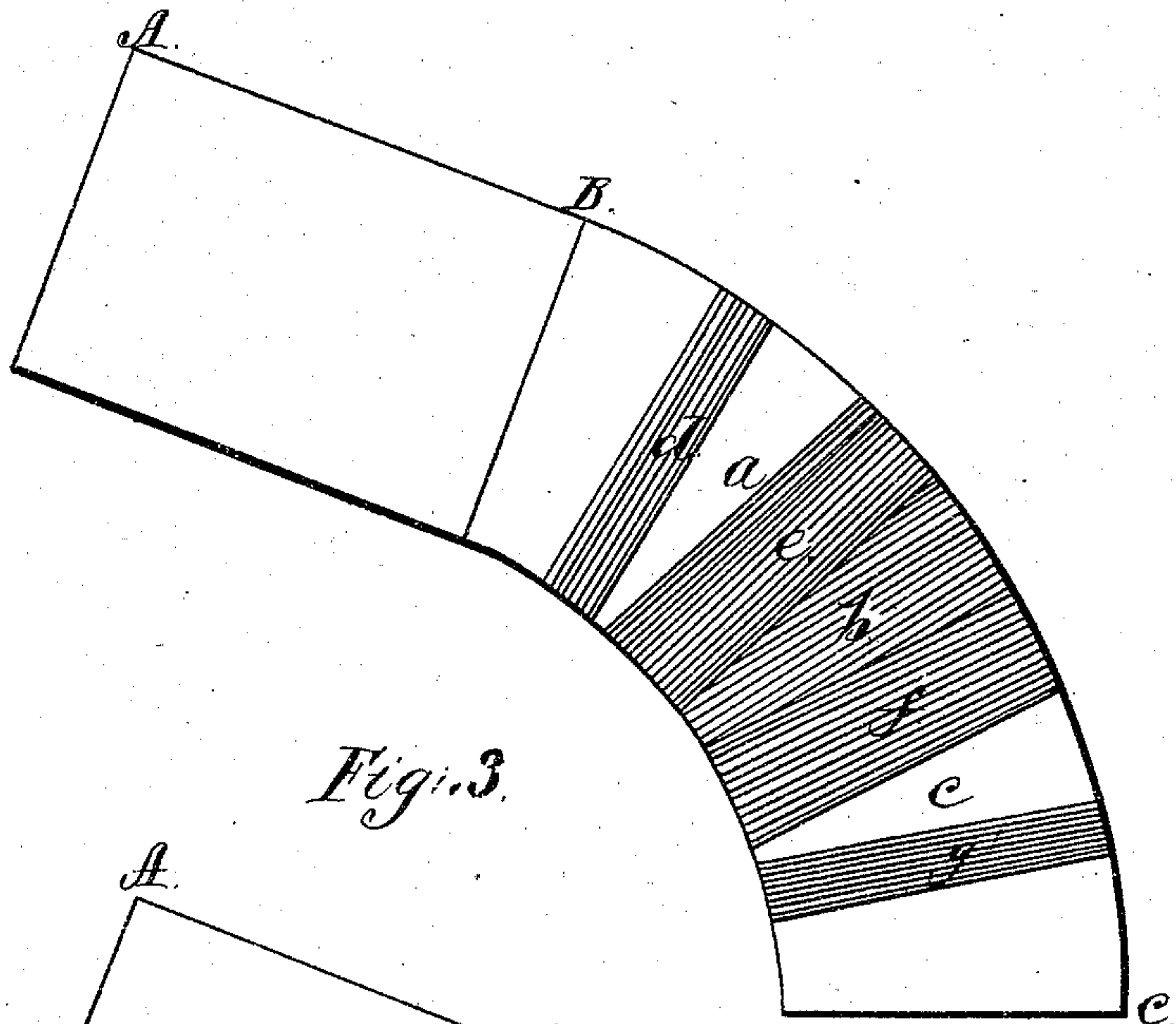


*E. S. Pierce.*

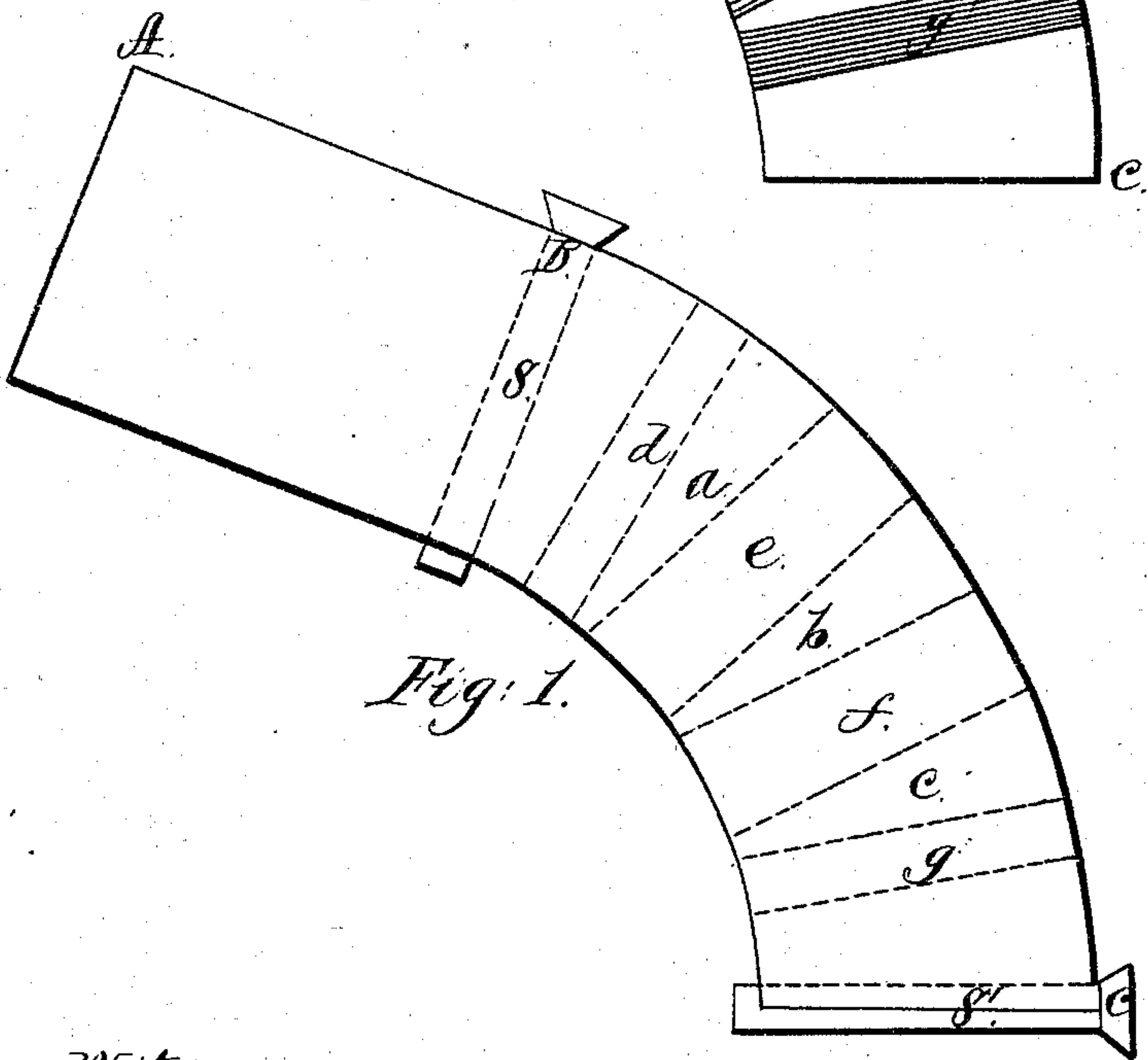
*Screw-Blank Feeder.*

*N<sup>o</sup> 70,257.*

*Patented Oct. 29, 1867.*

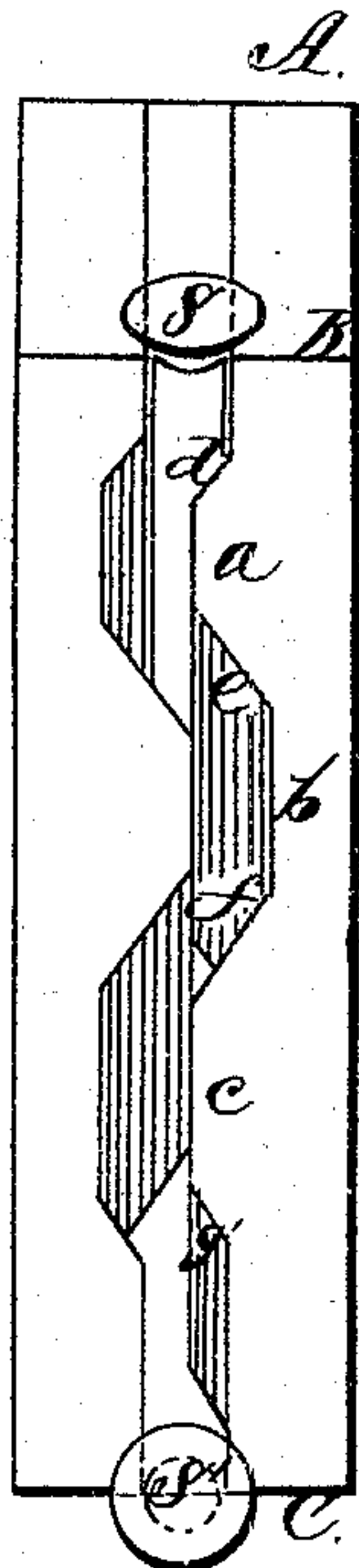


*Fig. 3.*



*Fig. 1.*

*Fig. 2.*



*Witnesses:*  
*L. Woodhouse*  
*Theo. G. Ellis.*

*Inventor:*  
*E. S. Pierce*

# United States Patent Office.

ELIJAH S. PIERCE, OF HARTFORD, CONNECTICUT.

*Letters Patent No. 70,257, dated October 29, 1867.*

## IMPROVED APPARATUS FOR FEEDING SCREW-BLANKS.

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, ELIJAH S. PIERCE, of Hartford, in the county of Hartford, and State of Connecticut, have invented an improved Feeding Apparatus for delivering Screw-Blanks or other similar articles into a machine; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 is a side view of the improved apparatus.

Figure 2 is a front view of the same.

Figure 3 is a view from the inside of the rear half of fig. 1, or the right-hand half of fig. 2.

Like letters in the several figures indicate like parts.

My invention consists in forming the channel-way, through which the blanks pass, of a number of corrugations or zigzag planes, so that where the blanks pass around a curve, as B C, they will be forced to follow the channel in radial lines, or nearly so, and be delivered in a proper position at the end of the curve. This is accomplished by making the corrugations in the direction it is desired the blank shall lie at each point in its passage through the channel-way to the machine. The grooves or corrugations of the opposite sides of the channel are made to fit into one another, so that the blank can only line in the same direction as the corrugations, and cannot lie angling with or across any one of the ridges. This forces the blank to follow the desired direction.

In the drawings, A B C is a channel for conducting blanks from a hopper or other receptacle to the machine. If it be, as ordinarily constructed, a plain channel, sustaining the blanks only by the heads, the tendency is for them to hang vertically, and when it is desired to have them pass around a curve, as B C, from the position S, and drop into the machine in a horizontal position, at S', they are apt to clog and interfere with each other when in a continuous row, and when passed through singly will drop into the machine point foremost instead of lying horizontally. With the corrugations placed in radial lines, as shown at *a b c*, in the drawings, the blank must in all cases pass around the curve in a radial direction. If the point hangs down it will strike against the inside end of the first corrugation *a*, and be there detained until the head reaches the same groove, when the blank will pass along to the next corrugation or groove. If the head gets in advance, it will in its turn be delayed until the point is sufficiently in advance to attain a radial position, when the blank will move forward.

The corrugations may be made, as shown in the drawings, of a series of planes, *a b c*, in the direction of the circle, connected by diagonal planes *d e f g*, or the channel may be made curved or serpentine. It can also be made so that the blank shall retain a radial position at all points, or so that the blank shall take any other desired position in different parts of the curve B C.

### Claim.

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

1. A zigzag or serpentine channel-way, formed of corrugated sides, substantially as herein described and for the purpose set forth.
2. The devices *a b c d e f g*, for maintaining screw-blanks or other similar articles in any desired position while passing through a channel or groove, substantially as herein specified.

E. S. PIERCE.

Witnesses:

L. WOODHOUSE,  
THEO. G. ELLIS.