

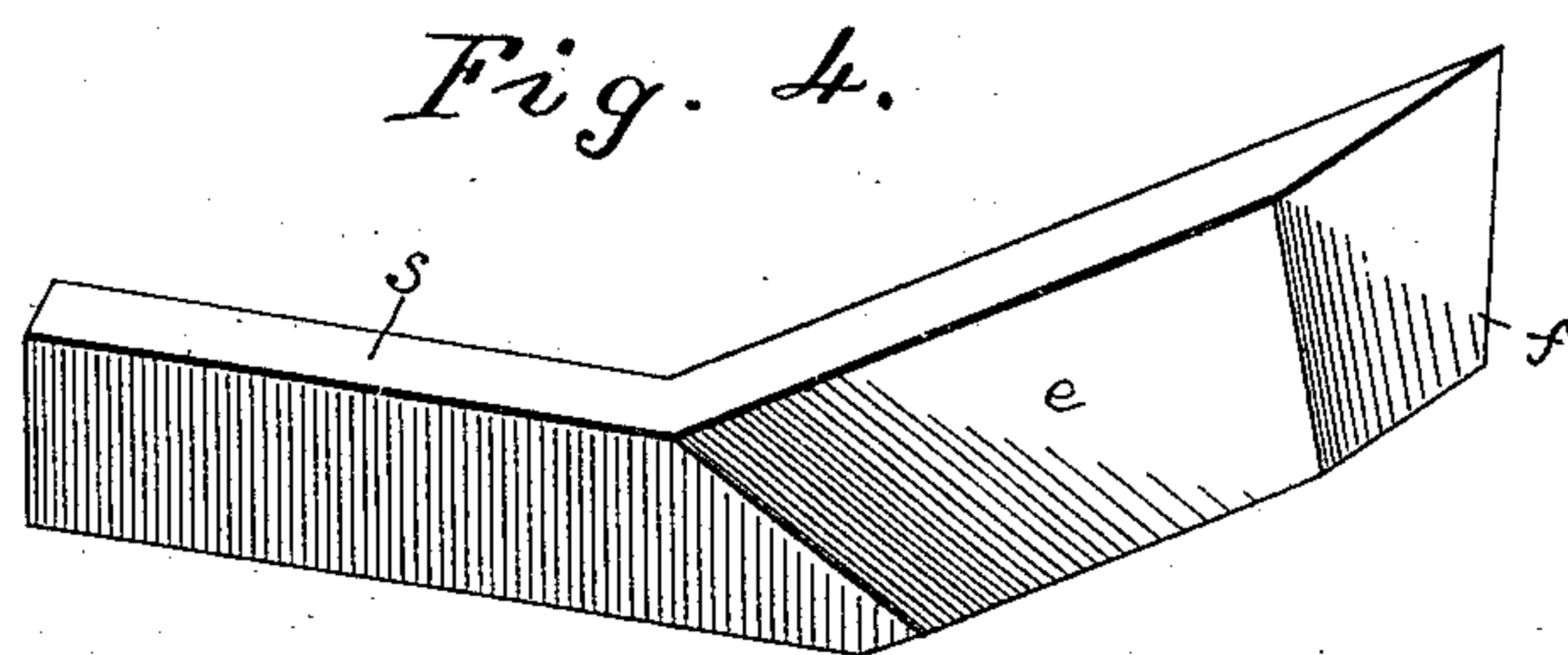
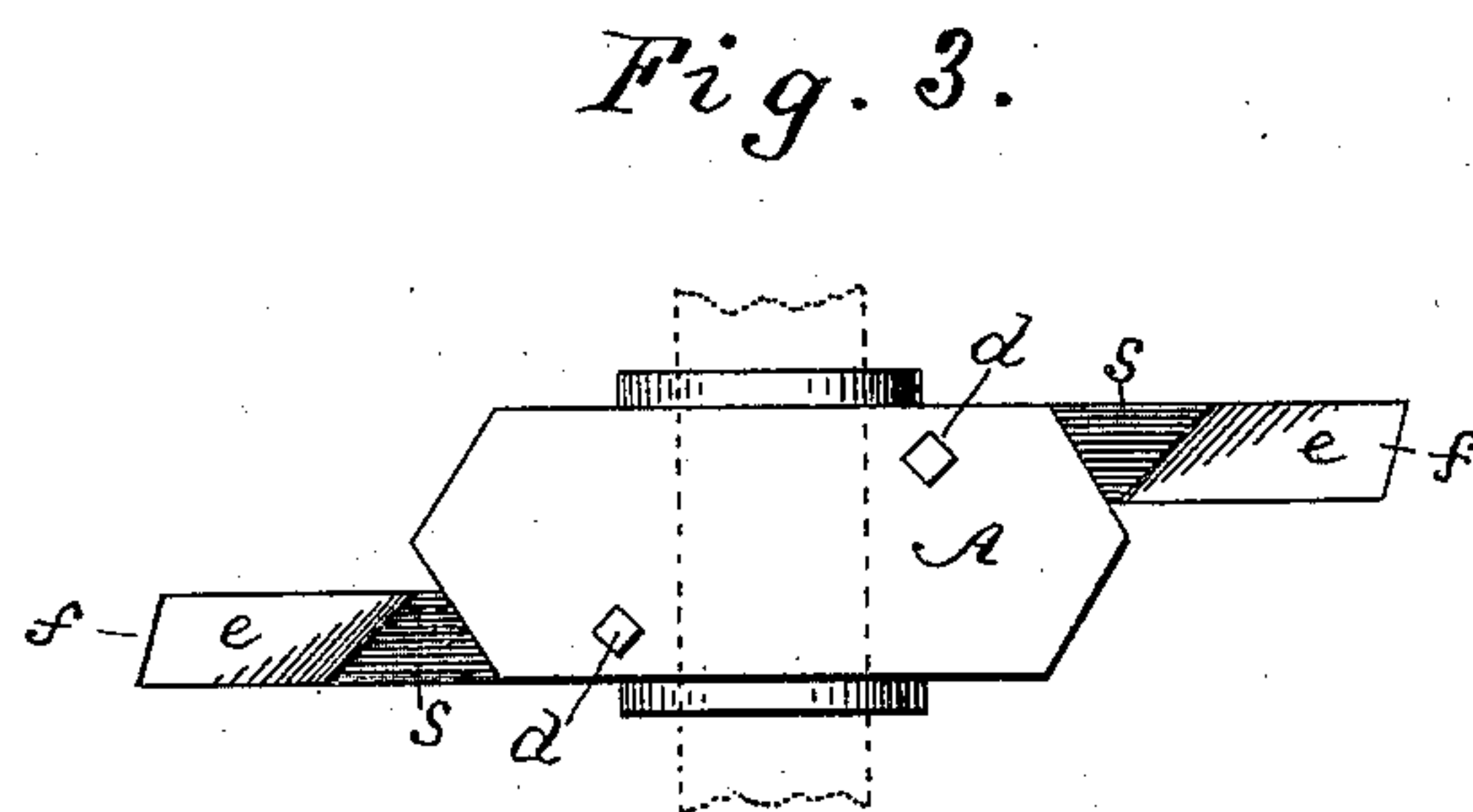
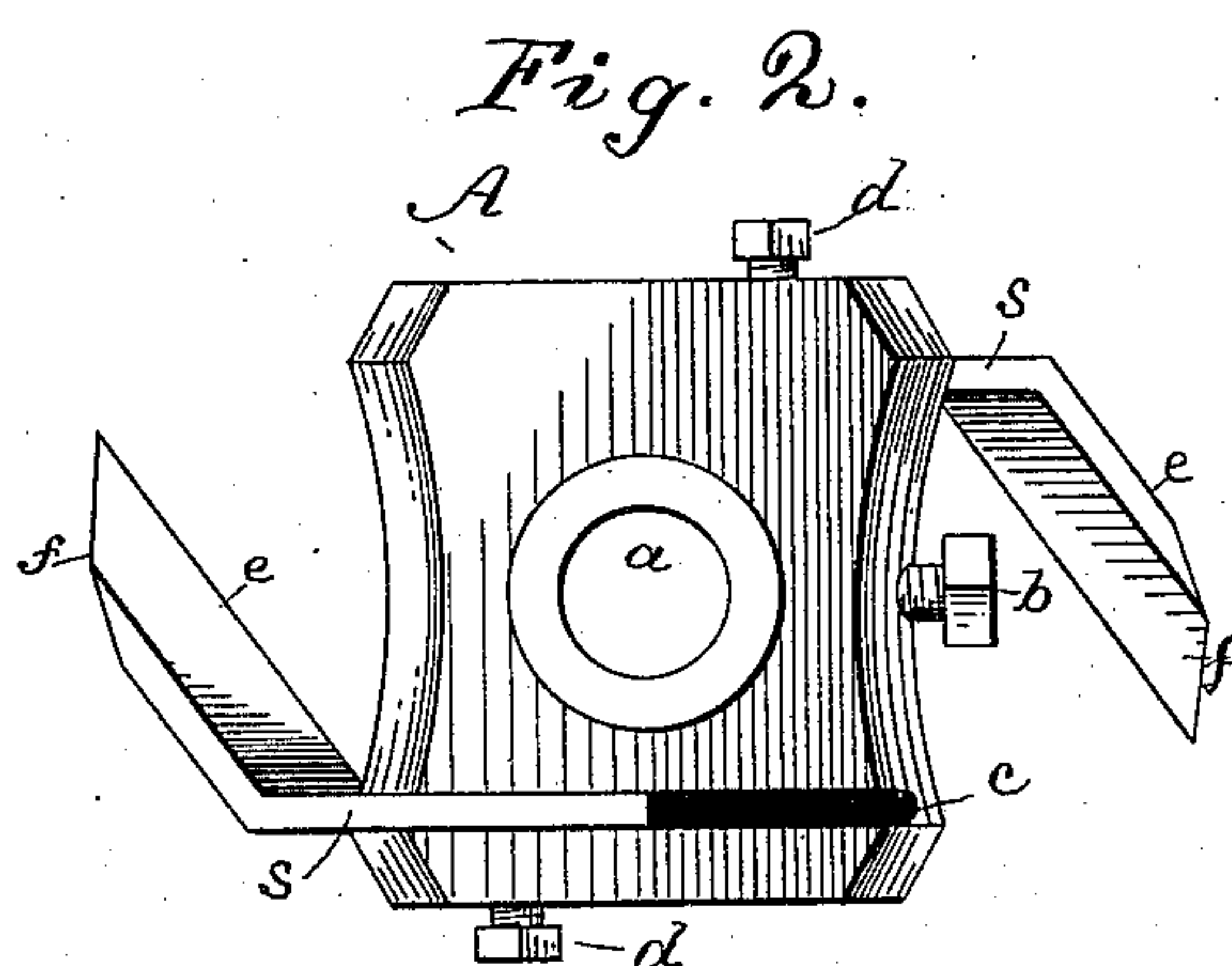
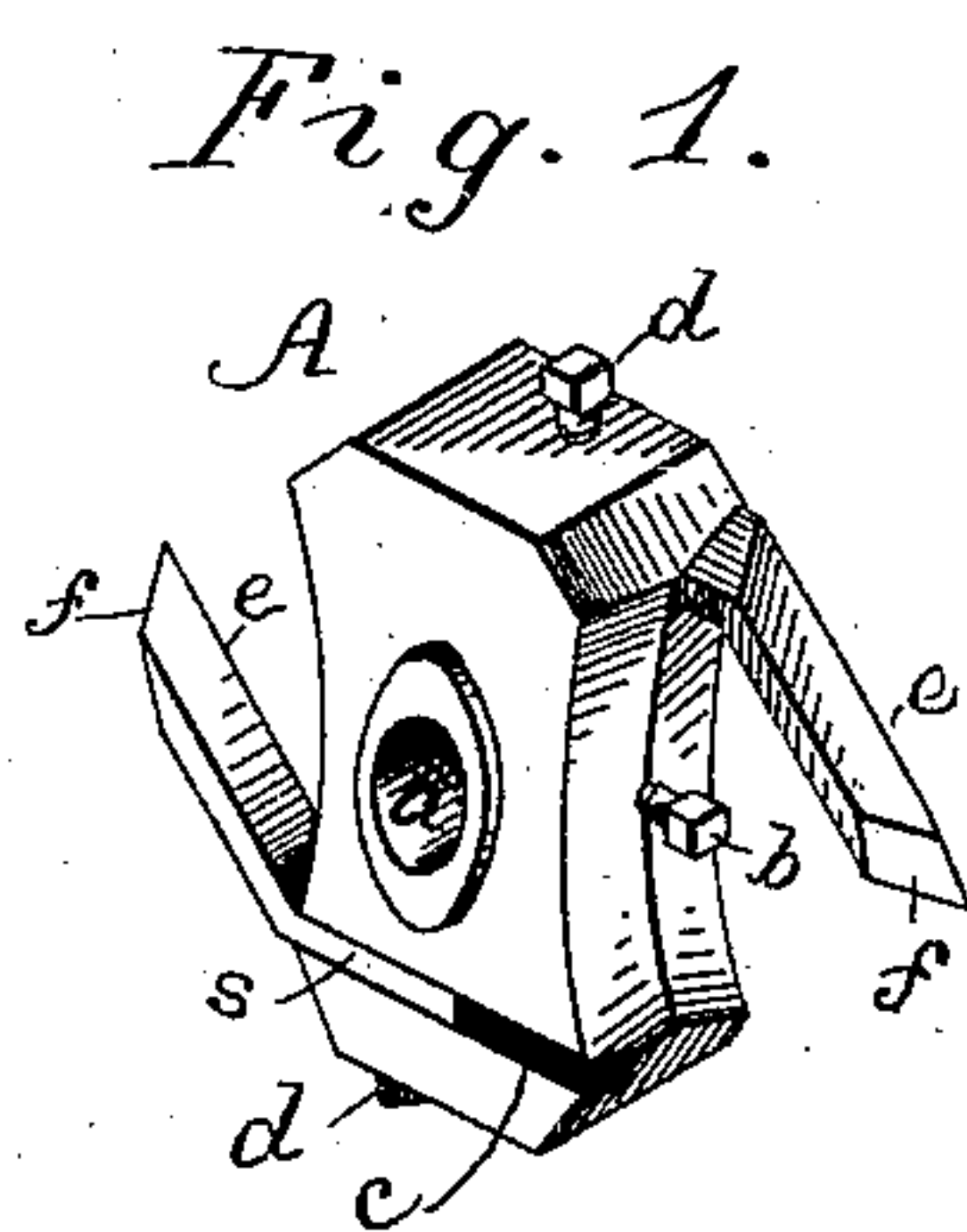
(No Model.)

H. CARSLY.

MACHINERY FOR DRESSING OR PLANING ICE.

No. 370,928.

Patented Oct. 4, 1887.



Witnesses

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HIRAM CARSELEY, OF LYNN, MASSACHUSETTS.

MACHINERY FOR DRESSING OR PLANING ICE.

SPECIFICATION forming part of Letters Patent No. 370,928, dated October 4, 1887.

Application filed June 15, 1887. Serial No. 241,368. (No model.)

To all whom it may concern:

Be it known that I, HIRAM CARSELEY, of Lynn, in the county of Essex, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Machinery for Dressing or Planing Ice; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a perspective elevation of a cutter-head and cutters in accordance with my invention, the nature of which is defined in the claims hereinafter presented. Fig. 2 is a side view, Fig. 3 a top view, and Fig. 4 a perspective view, of one of the cutters of such head.

The said cutter-head A is a block having a cylindrical hole, *a*, going transversely through it at its central part, for inserting a shaft through such head, there being in the head a set-screw, *b*, for fastening it to the shaft. The head is channeled or grooved on its opposite sides to receive the shanks of the cutters, one of such channels being shown at *c* in Fig. 1, the said shank *s* being held in place by a set-screw, *d*, screwed into the head and against the said shank. Each cutter is arranged to cut in a path next to that of the other, and the blade *e* of the cutter stands not only at an obtuse angle to the shank longitudinally thereof, but oblique to the shank *s* transversely thereof, the angle of obliquity being forty-five degrees, or thereabout. Furthermore, the cutting-edge *f* of the cutter forms an obtuse angle with one edge of the blade and an acute angle with the opposite edge of such blade, all being substantially as represented.

The said cutter-head and cutters are for dressing or planing a block of ice on its upper part, so as to remove from it snow or other matter and reduce the top to a plane surface.

In using the rotary ice-plane it is to be revolved, and while in revolution the block of ice is to be moved under it, so as to cause the cutters, while in rapid revolution, to reduce the upper part of the block. By having the blade of each cutter oblique to the shank both lengthwise and widthwise thereof, the blade not only cuts into the ice, but discharges the shavings laterally relatively to the blade. So by having the cutting-edge of each blade oblique to the opposite edges of the blade the cut is made with a drawing stroke, and much easier than would be the case were the cutting-edge square to each of the opposite edges of the blade.

I claim—

1. The combination of the rotary cutter-head and one or more cutters fixed therein, having the blade of each oblique both lengthwise and widthwise to the shank, substantially as set forth.

2. The combination of the rotary cutter-head and one or more cutters fixed therein, and having the blade of each oblique to the shank both lengthwise and endwise thereof, and also having the cutting-edge oblique to each of the opposite edges of such blade, all being essentially as and for use as set forth.

HIRAM CARSELEY.

Witnesses:

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