

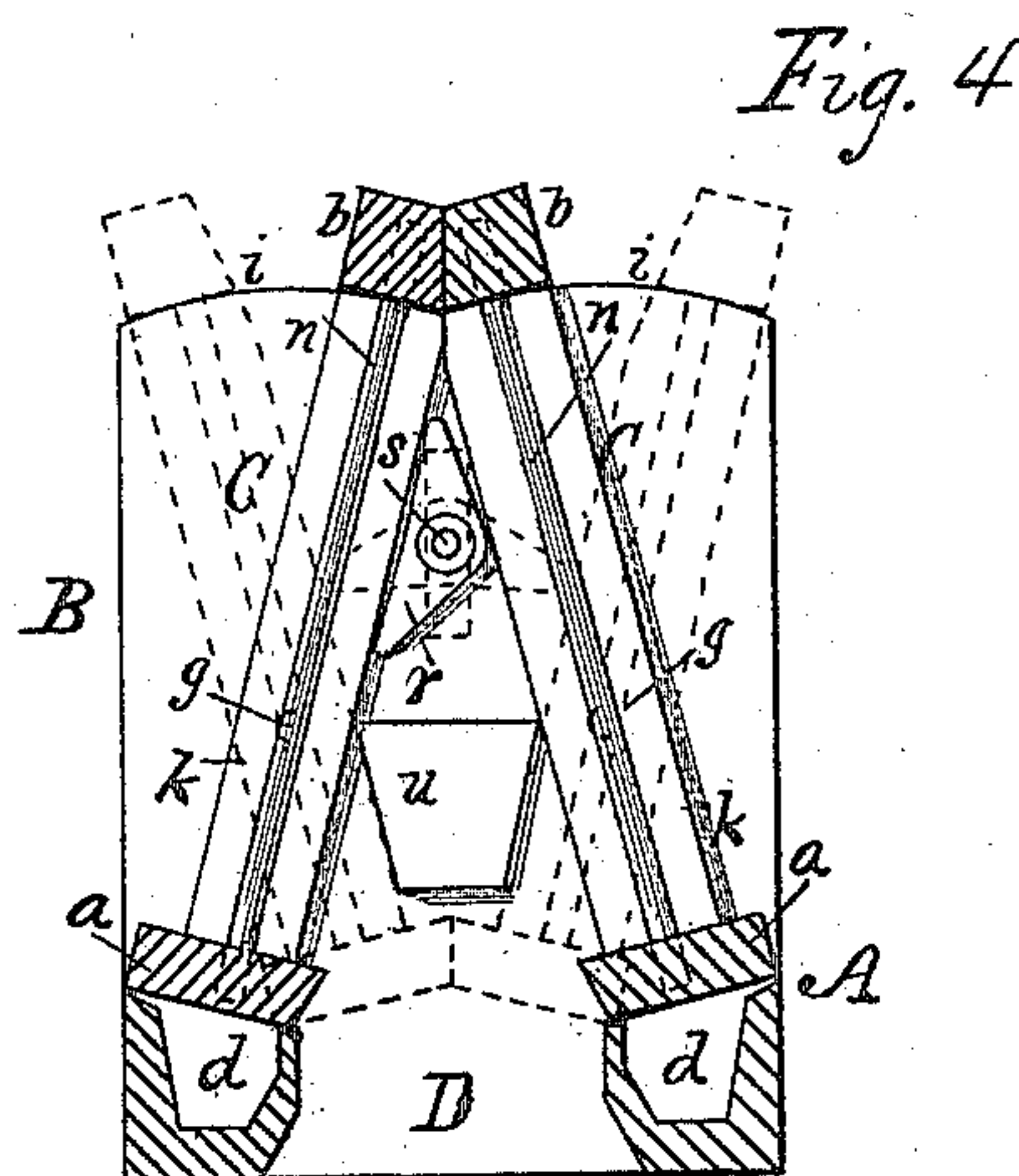
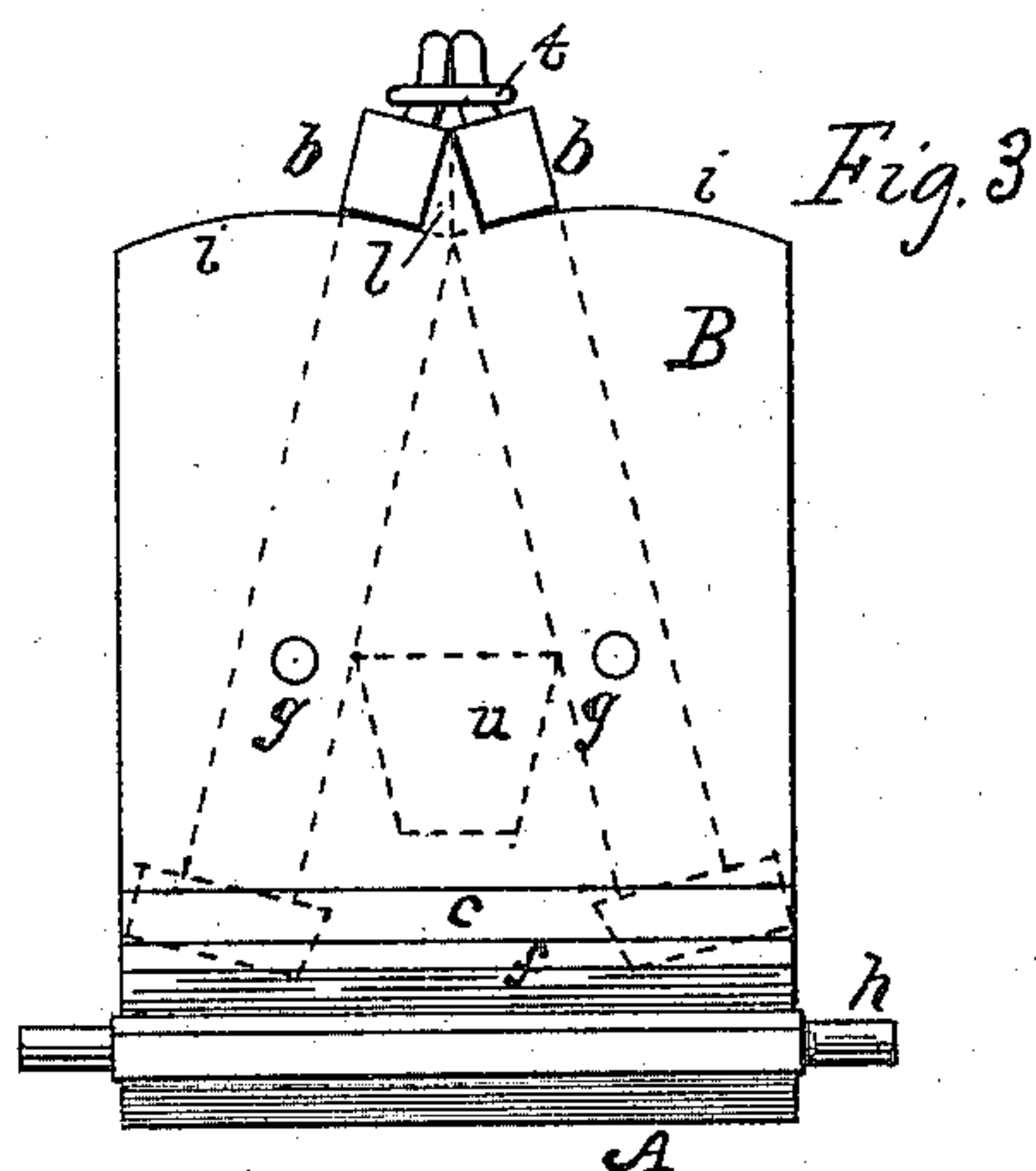
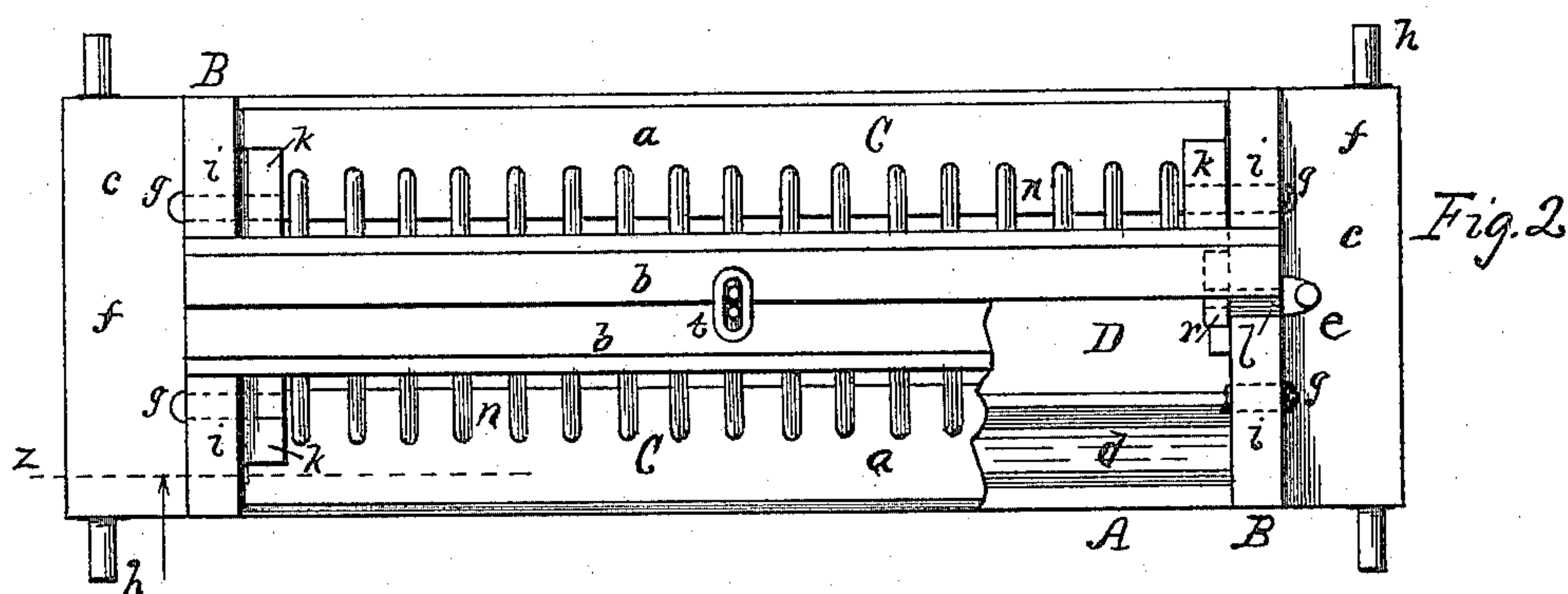
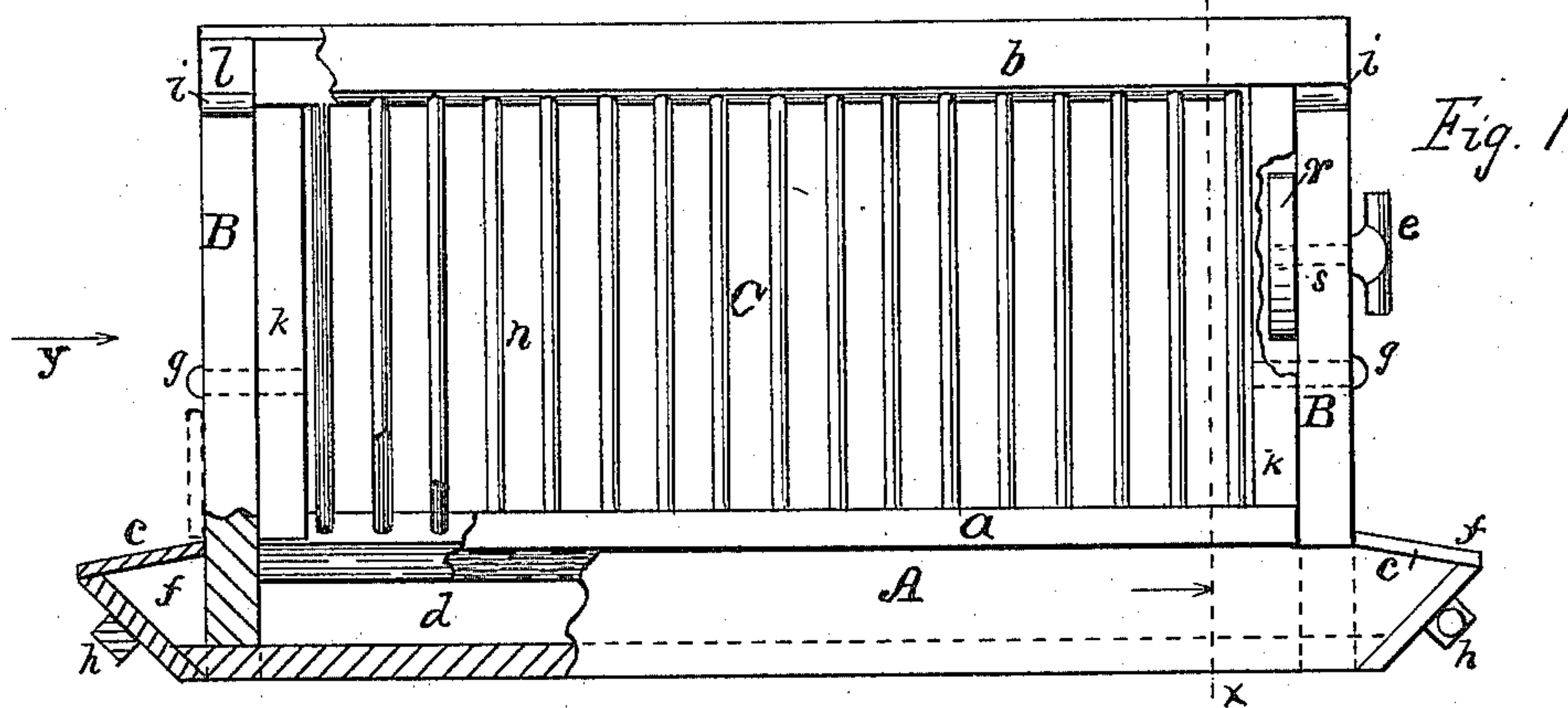
(No Model.)

D. W. SHORTER.

FEED RACK.

No. 363,089.

Patented May 17, 1887.



Attest:
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UNITED STATES PATENT OFFICE.

DENNIS W. SHORTER, OF UNION SPRINGS, ASSIGNOR OF ONE-HALF TO
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FEED-RACK.

SPECIFICATION forming part of Letters Patent No. 363,089, dated May 17, 1887.

Application filed November 23, 1886. Serial No. 219,615. (No model.)

To all whom it may concern:

Be it known that I, DENNIS W. SHORTER, of Union Springs, in the county of Cayuga and State of New York, have invented a new and
5 useful Improvement in Feed-Racks, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

The object of my invention is to produce an
10 improved animal feed-rack, the same being hereinbelow fully described, and more particularly pointed out in the claims.

The feed-rack shown is intended more particularly for feeding sheep.

15 Referring to the drawings, Figure 1 is a side elevation of my improved feed-rack, parts being broken away, and a part of the frame and other parts at the lower left-hand corner being vertically longitudinally sectioned, as upon
20 the dotted line *z* in Fig. 2, a cover of one of the salt-boxes being shown in dotted lines as raised; Fig. 2, a plan of the same, a part of one of the gates being broken away to uncover parts beneath; Fig. 3, an end elevation of the device seen
25 as indicated by arrow *y* in Fig. 1; and Fig. 4, a vertical transverse section of the device, taken as upon the dotted line *x* in Fig. 1, and viewed as indicated by the arrow pointed thereon, drawn to further show the positions
30 of the gates and the form and relation of the feed-trough, parts being shown in two positions by full and dotted lines.

Referring to the parts, A is the frame of the device, formed with equal vertical upright parts
35 or end boards, B, at the respective ends thereof, said end boards being opposite and parallel.

C are two equal opposing gates placed between said uprights, each being held upon two horizontal pivot-pins or bearings, *g*, rigid with
40 said uprights so as to swing or rock thereon. The pins *g* enter the end posts, *k*, of the gates, and all four said pins are in a plane parallel with the base of the device. The gates are formed with broad bottom rails, *a*, and top rails, *b*, with vertical slats or rods *n*, held by said rails. The
45 uprights B are formed with curved parts *i* at their respective upper ends, concentric with the respective pivot-pins *g*, and the top rails, *b*, of the gates extend at their ends over said
50 respective curved parts, resting thereon, as shown. By this means the weight of the gates,

together with that of the contained hay, stalks, or other fodder, is mainly supported, and the pivot-pins *g* are relieved of much of the strain that would otherwise fall upon them.

At the junction of the curved parts *i* the
55 uprights are formed with projecting parts *l*, which form rigid stops for the gates as they are brought together at the top, the rails *b* encountering said projecting parts, as shown. The frame is formed with longitudinal feed-
60 troughs *d* at each side, for containing cereals or other fine feed, and the gates are so hung that when swung apart at the bottom the bottom rails, *a*, thereof form covers for said
65 troughs. When the gates are swung together at the bottom, the troughs are uncovered, as shown.

r is a button held against the inner face of one of the uprights, upon the end of a shaft,
70 *s*, reaching horizontally through said upright, at the outer projecting end of which shaft a handle, *e*, is secured. The button is rigid with the shaft, and the latter is fitted to turn in its bearing in the upright. This button is
75 placed midway between the gates, and is of such form and length that when turned to a horizontal position its ends will bear against the adjacent posts of the gates when the latter are swung apart at the top, as shown, serving
80 to rigidly lock them in that position.

The gates are held together at the top by a simple link, *t*, slipped over the upwardly-projecting ends of the two middle slats or rods
85 thereof. These two locking or fastening devices—that is to say, the button and the link, respectively—prevent the position of the gates being altered by the animals feeding, whether said gates may be opened or closed at the top.

At the ends the device is formed with trans-
90 verse salt-boxes *f*, provided with hinged covers *c*, which latter may be swung upward against the respective uprights and secured thereto when salt is to be fed to the animals.

Carrying bars or handles *h* are secured at
95 the ends of the device, as a matter of convenience in moving it about.

I secure tapering blocks *u* rigidly against the inner faces of both the uprights, between and in contact with the posts of the gates, as
100 shown, which serve to support the gates against an inward pressure exerted by the

animals while feeding. The top lines of these respective blocks coincide with the lines joining the centers of the pins *g* at either end of the device, on account of which the upper corners of said blocks are in contact with the two adjacent posts of the respective gates, in whatever position the latter may be. The blocks thus serve at all times to support the gates against pressure from without and relieve the pins of strain.

In use the gates are thrown apart at the top, giving an opportunity to the sheep to eat from the troughs *d*. While thus feeding, hay or other fodder is placed between the gates. When the feeding at the troughs terminates, the gates are swung together at the top and secured by the link, as stated, and the animals allowed to feed by reaching through between the slats *n*. The troughs *d*, being covered when the gates are in this position, are kept clean, and the animals prevented from putting their fore feet therein. While the gates are together at the top the hay or contained fodder is in such position that thistles or other extraneous matter contained therein rejected by the sheep, in falling, drop into the space or opening *D* within the frame at the bottom thereof. When this space becomes filled with rejected matter, the device is moved by persons grasping the handles *h*. One important advantage of this device is that the dirt and foreign matter contained in the fodder falls within the gates, as stated, and not upon the necks of the sheep, the wool of which is the most valuable part of any upon the sheep. In

ordinary ways of feeding from hay and similar fodder, burrs, leaves, and spines of thistles, and other substances that cling to the wool, fall upon the necks of the sheep, fouling the wool, which adds much to the trouble and expense of washing.

What I claim as my invention is—

1. A feed-rack having rigid end boards, in combination with tilting gates pivoted to said end boards, and longitudinal feed-troughs at the sides of the rack, the sills of said gates forming covers to close said respective troughs, substantially as shown.

2. A feed-rack having rigid end boards, in combination with tilting gates pivoted to said end boards, a stop-button pivoted to one of said end boards between said gates, and rigid supports *u* for the gates, held to coincide with the respective lines joining the adjacent pivots of said gates, substantially as and for the purpose set forth.

3. In a feed-rack, rigid opposing upright parts or end boards, in combination with a pair of gates held therebetween upon pivot-pins or bearings to beswung in vertical planes, said end boards being formed with curved parts concentric with said pivots, and said gates being formed with extended parts to bear upon said curved parts, substantially as and for the purpose specified.

DENNIS W. SHORTER.

Witnesses:

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