

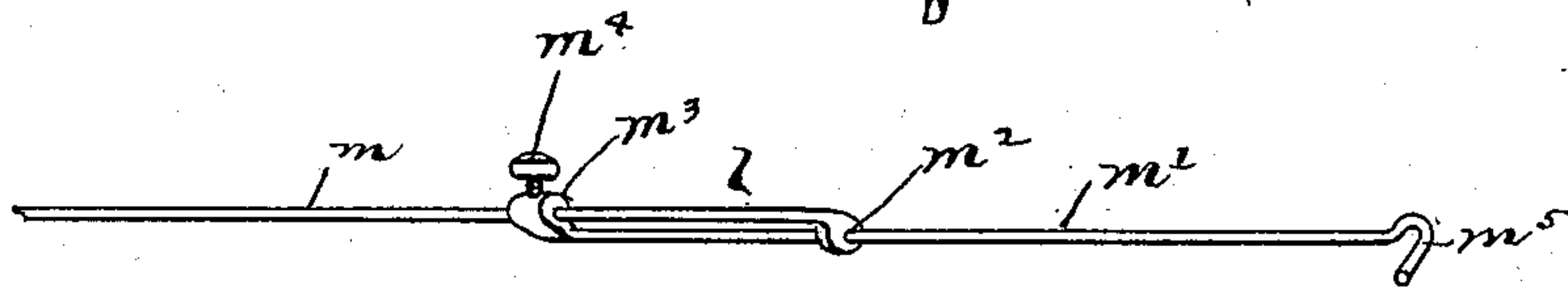
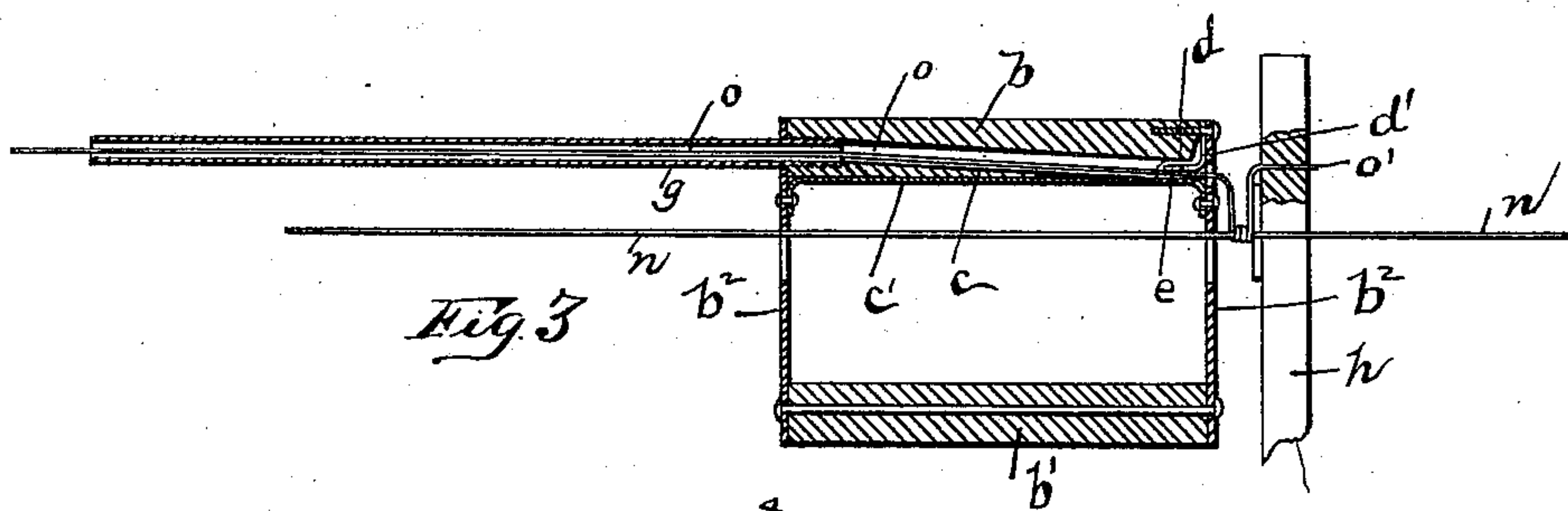
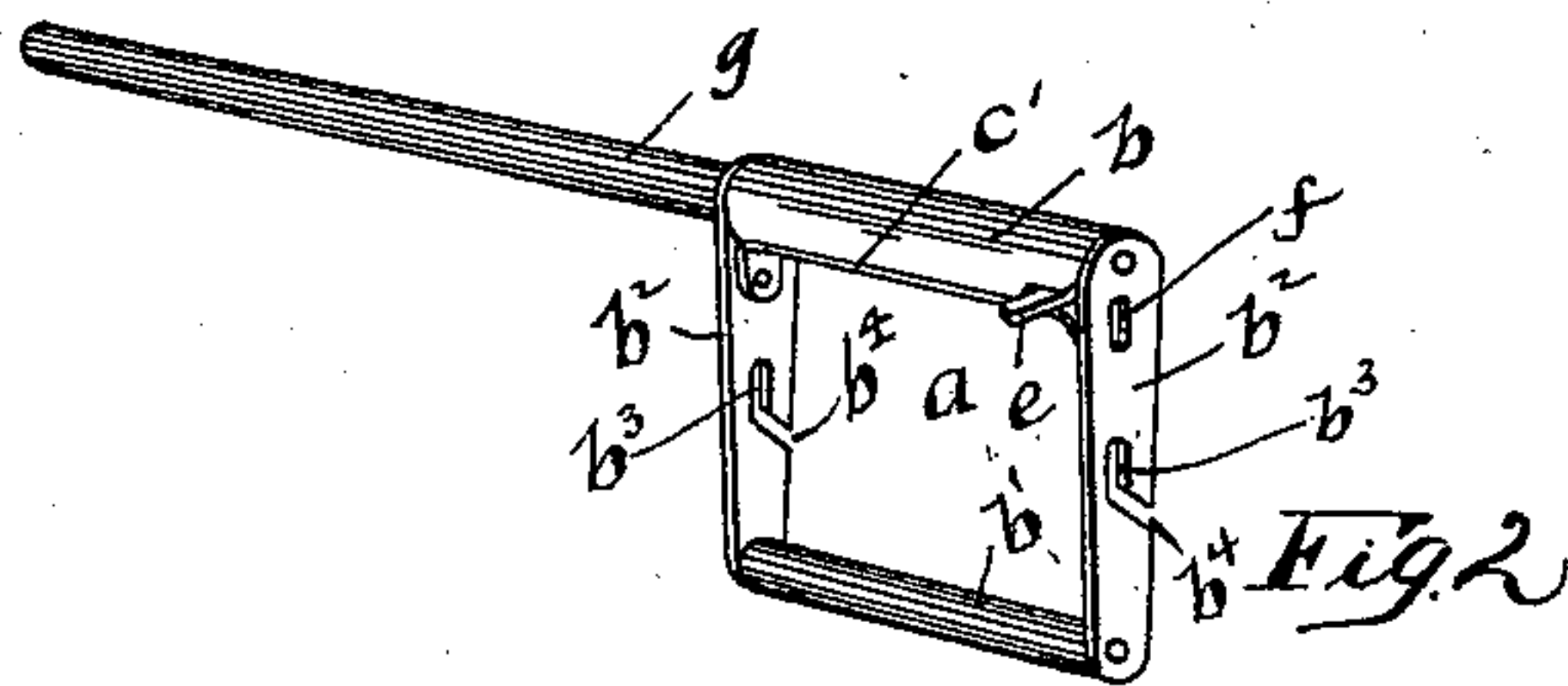
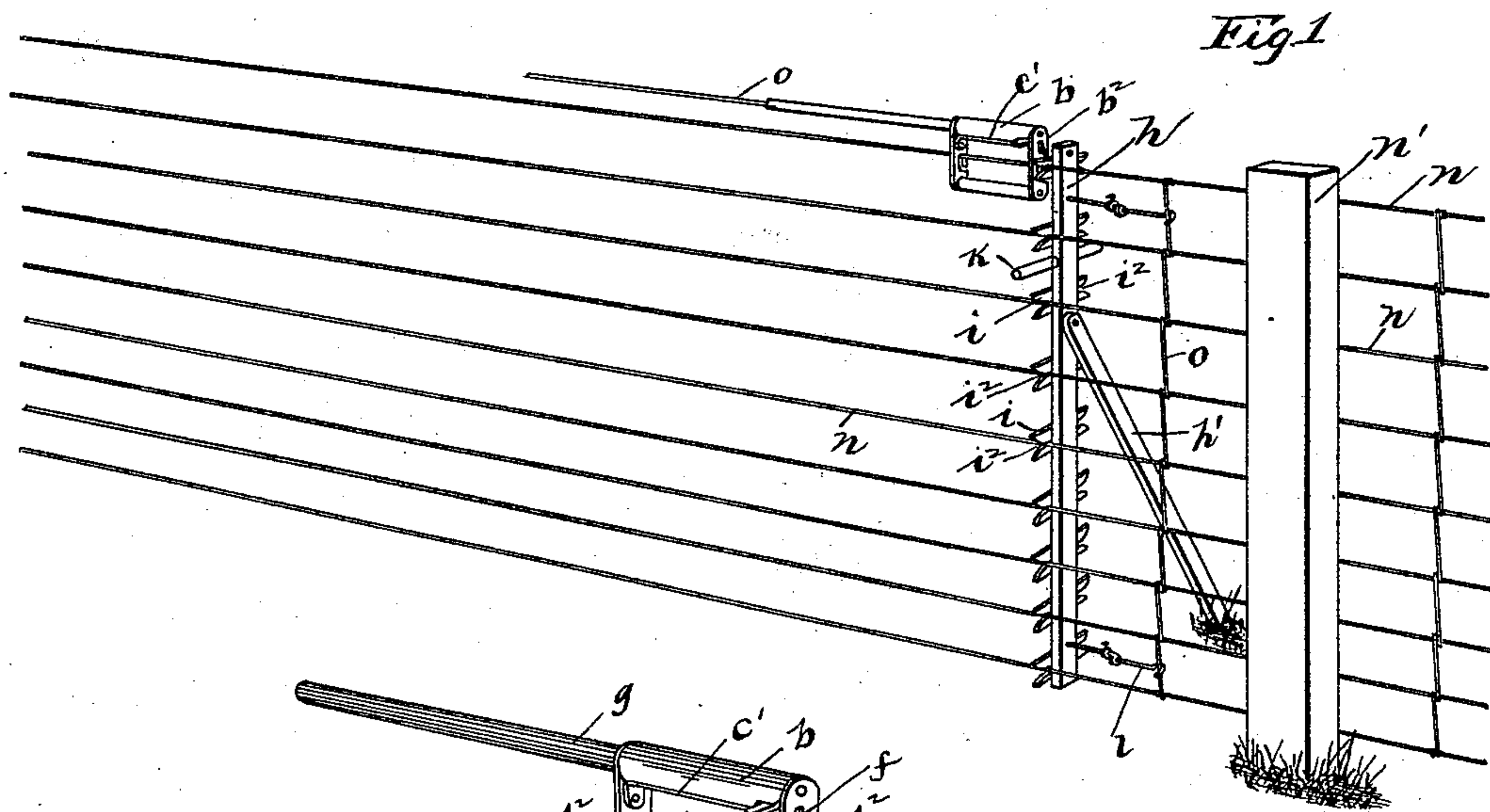
(No Model.)

J. L. SHOUGH.

DEVICE FOR WEAVING CROSS WIRES IN WIRE FENCES.

No. 532,599.

Patented Jan. 15, 1895.



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DEVICE FOR WEAVING CROSS-WIRES IN WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 532,599, dated January 15, 1895.

Application filed June 4, 1894. Serial No. 513,398. (No model.)

To all whom it may concern:

Be it known that I, JACOB L. SHOUGH, a citizen of the United States, residing at Somerset, in the county of Perry and State of Ohio, have invented a certain new and useful Improvement in Devices for Weaving Cross-Wires in Wire Fences, of which the following is a specification.

My invention relates to machines for weaving wire fences and the objects of my invention are to produce a simple and inexpensive machine of this class by means of which cross wires may be rapidly and effectively interwoven with the usual longitudinal fence wires and to produce other improvements in details of construction which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of a wire fence showing my machine in position for weaving. Fig. 2 is a view in perspective of the weaver frame. Fig. 3 is a central longitudinal section of the same, and Fig. 4 is a view in perspective of one of the gages employed in the fence construction.

Similar letters refer to similar parts throughout the several views.

a represents the weaver the body of which, as shown, consists of two parallel pieces *b b'*, the latter being rounded to form a handle, the ends of said pieces *b b'* being connected by end plates *b²*. The end pieces *b²* of the weaver frame thus formed are provided about midway of their length with short slotted openings *b³* which lead outward as indicated at *b⁴* through entrance slots formed in corresponding edges of said end pieces.

In the formation of the horizontal top piece *b* of the weaver frame, I provide throughout the same a longitudinal passage which is indicated at *c*, the under side of said top piece preferably being bound by a plate *c'* which extends beneath said piece *b* and the ends of which are secured to the ends of the piece *b²* of the frame. In forming said piece *b*, I also cut away a portion of the forward end thereof beneath its point of attachment with the forward end piece *b²* as indicated at *d*, this cut or recess being formed for the purpose of receiving an angular spring strip *d'* the outer or vertical arm of which is secured to the in-

ner side of the forward end piece *b²* and the lower horizontal arm of which extends as shown within the passage *c* of the arm *b*. This inner horizontal portion of said spring strip is provided with an outwardly projecting finger piece *e*. I also form in the forward end piece *b²* opposite and communicating with the forward end of the passage *c* a short longitudinal slotted opening *f*. Screwed or otherwise secured within the rear end of the frame passage *c* is the forward end of a rearwardly extending tubular guide arm *g*.

In the construction of my machine I also employ a brace frame for the longitudinal wires of the fence, which as indicated in the drawings, consists of a vertical bar *h* to which is fulcrumed at a point above the center of its height a brace arm *h'* which is adapted to be inclined outwardly therefrom as shown. On that face of the bar *h* which we will term the rear face, are secured at the centers of their lengths cross plates *i*, the latter being arranged one above the other at intervals corresponding with intervals between the longitudinal wires of the fence on which the same is to be employed. As shown in the drawings, each end of each of the cross bars or plates *i* is notched or recessed centrally at *i²*. I provide the upper portion of the bar *h* with oppositely located projecting handle portions *k*.

I also employ in conjunction with my machine a gage for regulating the distances between the cross wires of a fence, said gage being shown more clearly at *l* in Fig. 4 of the drawings. This gage which is formed in two sections consists of a rod *m* which is adapted to be rigidly connected with and extend from the bar or standard *h* near the upper and lower ends thereof. The second section of the gage which is indicated at *m'* also consists of a rod which passing loosely through an opening in the downturned outer end of the rod *m* and as indicated at *m²* has formed with its inner termination an enlargement or guide projection *m³* through which passes and slides the rod *m*. The gage thus formed is adapted to be increased and decreased in length by sliding said rods away from or toward each other and fixing them at the desired length by turning inward a set screw *m⁴* which enters the enlargement *m³* of the rod *m'*. The

outer end of the rod m' is provided, as shown, with a suitable hook projection m^5 .

In utilizing my invention for the purpose of weaving or supplying the cross wires in a wire fence, the longitudinal wires of the fence which are indicated at n are first secured in their positions to the posts n' . The brace frame is then so supported that said longitudinal wires are caught within the notches of corresponding ends of the cross plates i and the brace arm h' is made to bear against the ground and at the desired angle with the standard or bar h . A cross wire o of the desired length is then inserted, as shown in the drawings, through the tubular extension g of the weaving frame, thence through the passage c of the frame arm b passing beneath the horizontal portion of the spring d' and extending outward through the slotted opening f of the forward end piece b^2 . This outwardly projecting end which is indicated at o' is, as shown in the drawings, adapted to be inserted in the opening in the upper end portion of the bar h or otherwise engaged with said bar and the longitudinal wire n to which said cross wire is first to be attached, is caused to be engaged, as shown, with the recesses or slotted openings b^3 of said frame a .

The parts of my device being in the positions described the frame a is rotated about said first longitudinal wire resulting as indicated more clearly in Fig. 3 of the drawings, in the wire o being wound or closely twisted about said longitudinal wire. During this process it is evident that the wire o will be gradually drawn outward through the tube portion g and frame portion b , the spring d' which bears thereon serving as a tension brake to regulate the feed of the wire. Having thus made the required or desired number of turns of the cross wire about said horizontal wire, the weaving frame is disconnected from said first wire, dropped downward and similarly connected with the next succeeding lower longitudinal wire where the process of rotation is repeated. In this manner it is evident that the cross wire will be carried downward to the bottom of the fence or terminated at any one of the wires n . The first cross wire having thus been connected with the longer wires, the brace frame may be moved onward in the direction of the fence and connected therewith in the manner first prescribed and the operation repeated. In order to equalize the distances between the vertical strands of the cross wires, I employ the gage l the hook m^5 being connected with the last completed cross wire, as shown in Fig. 1 of the drawings.

From the construction which I have shown and described herein, it will be seen that the

cross or vertical wires of the fence may be made to extend partially or wholly throughout the height of the latter, and that the weaving frame is of such construction as to admit of its being rotated within a comparatively small space, thus allowing the longitudinal wires of the fence to be arranged comparatively close to each other if desired.

Owing to the fact that the cross plates i of the bar h are arranged to project on opposite sides thereof, it is evident that the brace frame might be employed on either side of the fence.

It is evident that my improved weaving device may be produced at a reasonable cost of manufacture; that its operation is simple and rapid and that a fence constructed thereby will be at once strong and durable.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device for weaving cross wires in wire fences, the combination in a weaving frame, of a substantially rectangular frame a consisting of parallel pieces b , b' and end pieces b^2 , said piece b having a passage there-through, and said end pieces b^2 having recesses or open slots b^3 therein, and one of said end pieces having an opening f which communicates with the passage through the arm b , substantially as and for the purpose specified.

2. In a device for weaving cross wires in wire fences, the combination with the weaver frame a consisting of the pieces b , b' and end pieces b^2 connecting the same, a passage through said arm b , and a slotted opening communicating with said passage through one of said end pieces b^2 , of a spring strip d' having one of its ends secured to said frame and its other end projecting within the passage of the arm b , a tubular extension g of said arm b , and means for detachably journaling said frame on a fence wire, substantially as and for the purpose specified.

3. In a device for weaving cross wires in a wire fence, the combination with the weaver frame a consisting of parallel arms b , b' and end pieces b^2 , a passage through said arm b , a slotted opening in one of the end pieces b^2 communicating with said passage, and means for detachably connecting or journaling said frame with a longitudinal fence wire, of a brace frame consisting as described of a bar or standard h , notched plates secured thereto and projecting therefrom, and a brace arm h' jointly connected therewith, substantially as and for the purpose specified.

JACOB L. SHOUGH.

In presence of—

C. C. SHEPHERD,
R. L. GILLIAM.