

G. A. WINDUS.  
 APPARATUS FOR DEHORNING CALVES.  
 APPLICATION FILED AUG. 26, 1909.

980,725.

Patented Jan. 3, 1911.

Fig. 1.

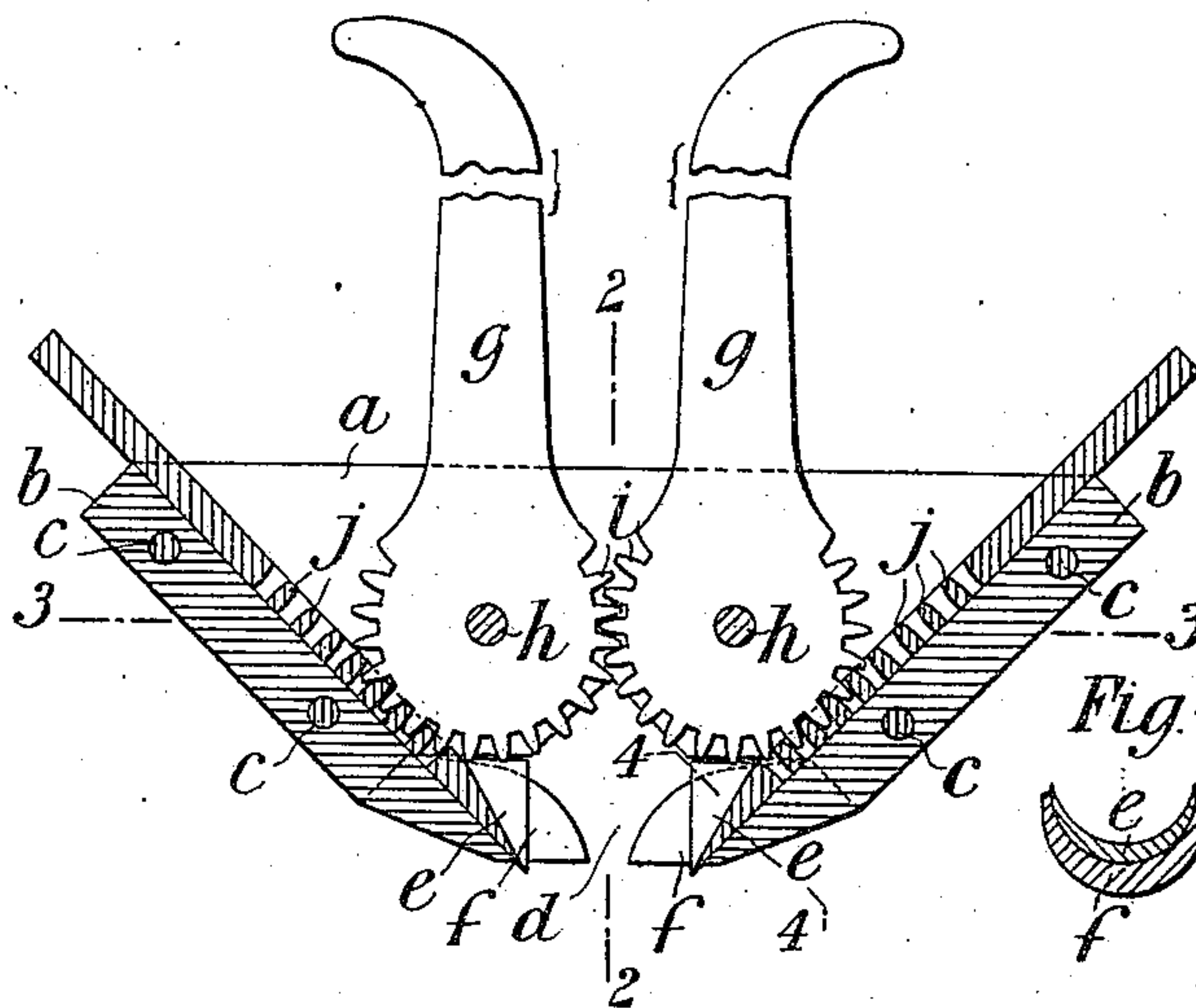


Fig. 2.

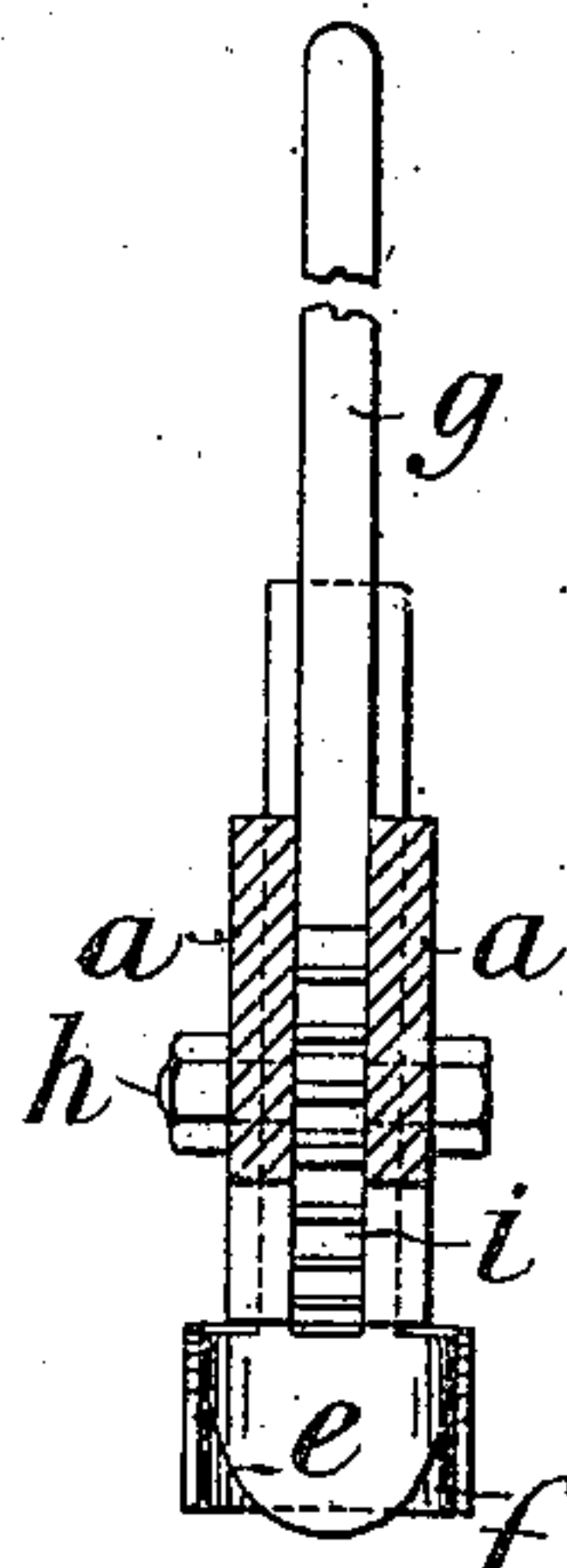


Fig. 4.



Fig. 3.

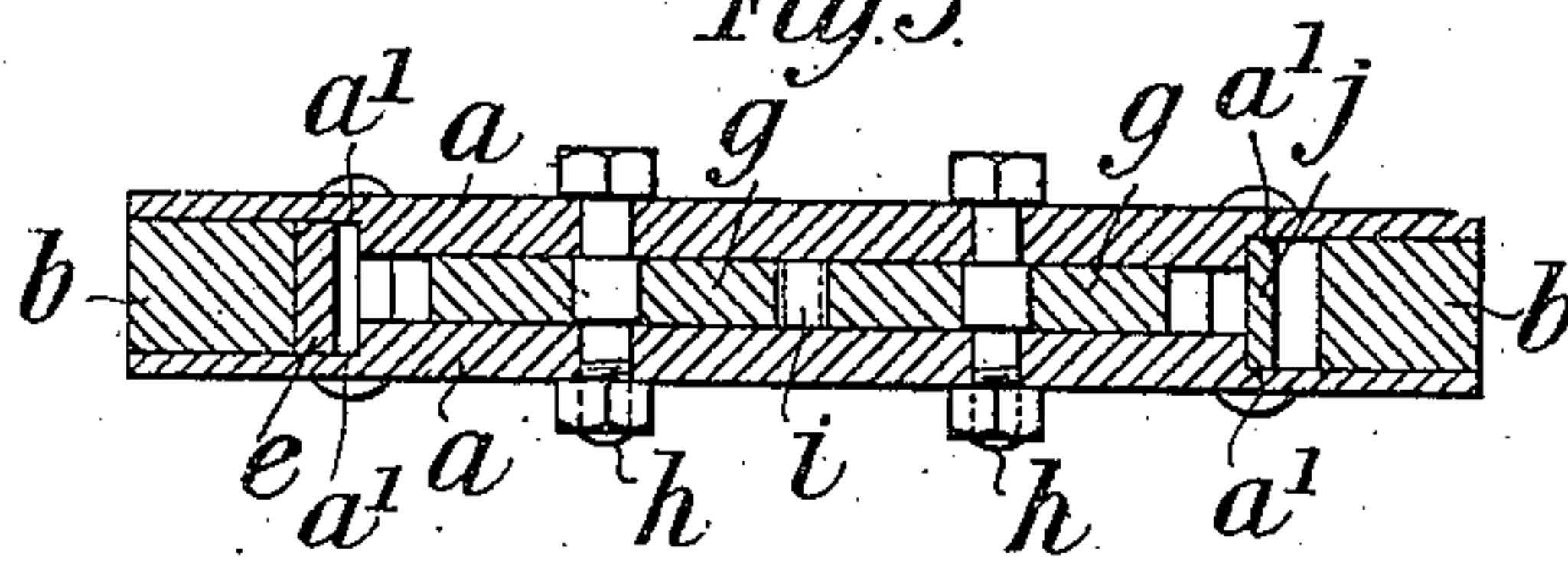


Fig. 6.

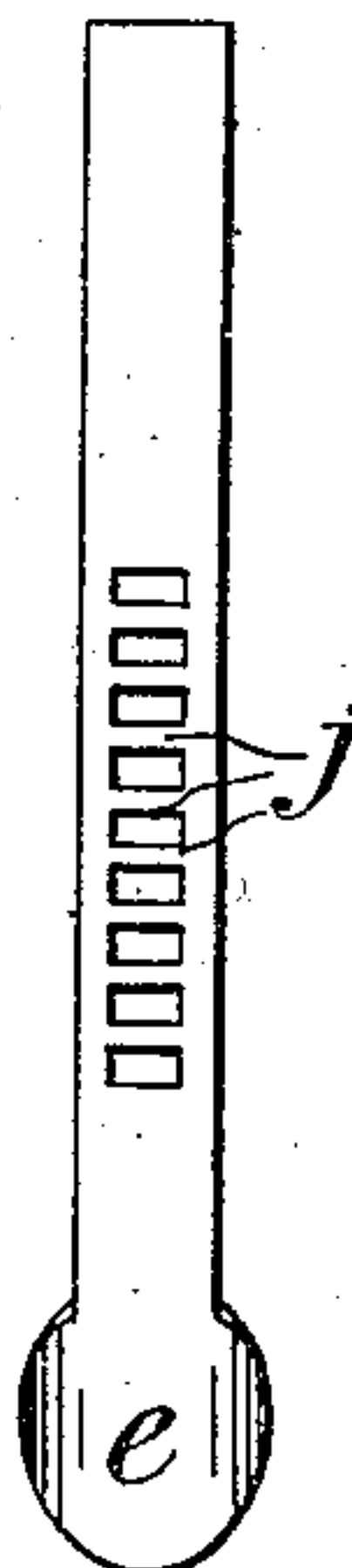


Fig. 5.

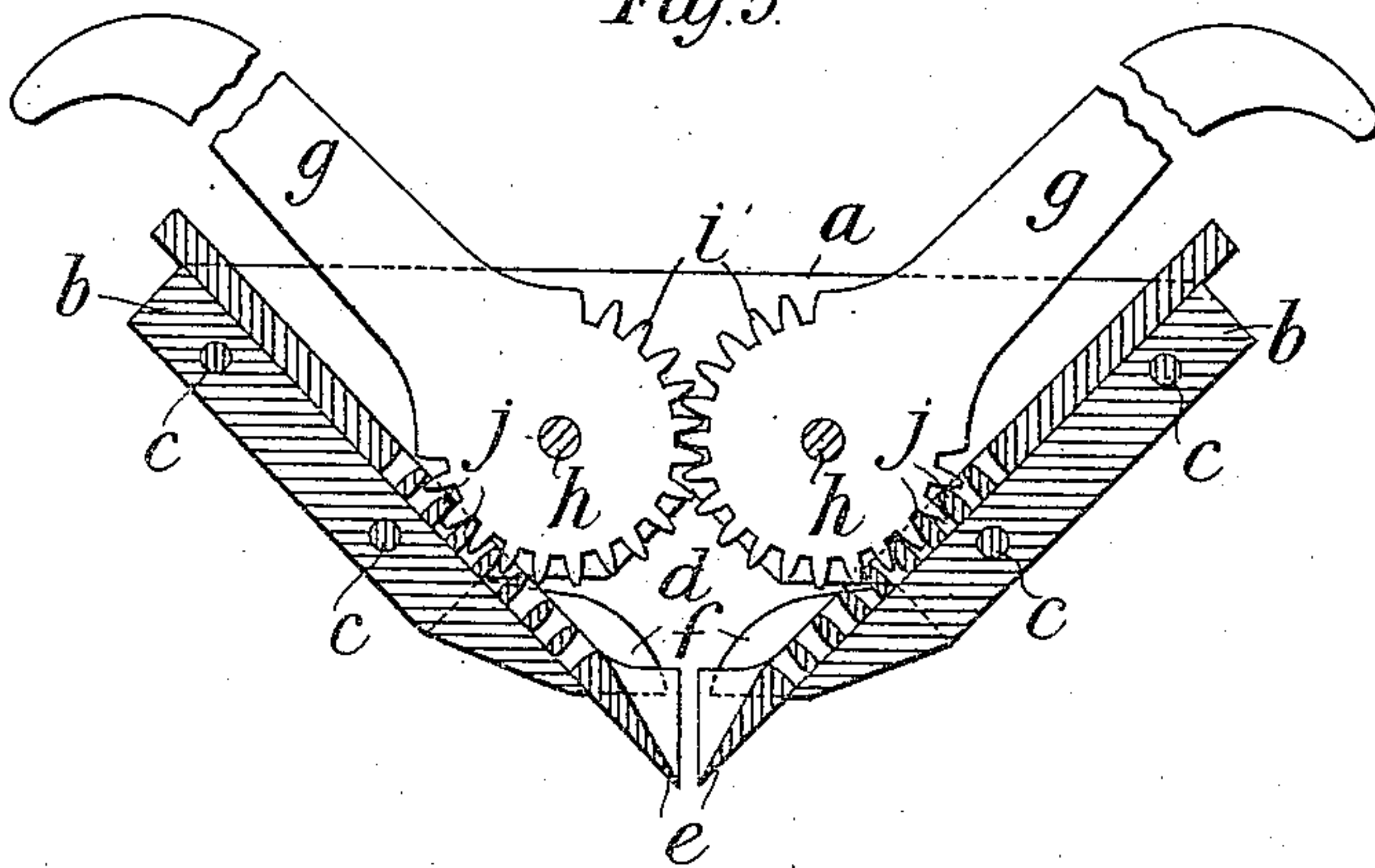


Fig. 7.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

GERALD ARTHUR WINDUS, OF ESTANCIA, DRABBLE, ARGENTINA.

## APPARATUS FOR DEHORNING CALVES.

980,725.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed August 26, 1909. Serial No. 514,779.

To all whom it may concern:

Be it known that I, GERALD ARTHUR WINDUS; a subject of the King of Great Britain, residing at Estancia "El Plata," Drabble, Ferro Carril Oeste, Province of Buenos Ayres, Argentina, have invented new and useful Improvements in Apparatus for Dehorning Calves, of which the following is a specification.

This invention relates to means for removing the horns of calves and other animals more effectively and with less pain than is possible with the methods now generally employed.

According to the invention I provide a pair of gouges designed to slide in intersecting paths, and means for reciprocating them in such paths.

In a suitable arrangement for carrying out my invention I provide a hollow frame or box approximately in the form of a right angled triangle, and advantageously formed of two side plates grooved or rabbeted at the edges which form the right angles and with intermediate spacing pieces between them, a hole or aperture being formed at the right angle between the spacing pieces. In the grooves of the side plates slide the gouges which are designed to be projected through an aperture to cause them to grip the horn and penetrate to the root of the same, so as to cut the same away without having to withdraw the instrument. The movement of the gouges is effected by means of two pivoted levers provided with teeth which gear the levers together and also engage with teeth or recesses on the gouges.

To enable my invention to be fully understood I will describe the same by reference to the accompanying drawing, in which:—

Figure 1 is a sectional side elevation of the improved dehorning apparatus showing the gouges in their retracted position, and Figs. 2, 3, and 4 are sections on the line 2—2, 3—3, and 4—4 respectively of Fig. 1. Fig. 5 is a view similar to Fig. 1 showing the gouges in a position protruded from the box or casing. Fig. 6 is a detail view of one of the gouges, and Fig. 7 is a view showing one of the spacing pieces of the box provided with a guide for the gouge.

$a, a$  indicate the side plates of the box, and  $b, b$  the spacing pieces between the said plates, the said side plates and spacing pieces being connected by any suitable means, for instance, by rivets  $c, c$ .

$d, d$  is the space or opening formed between the spacing pieces and which allows of the instrument being placed over the horn to be cut out.

$e, e$  are gouges which are located in the same plane and are adapted to slide upon the inner faces of the spacing pieces  $b, b$  and within grooves or rabbets  $a^1, a^1$  of the plates  $a, a$ . They are formed with grooved cutting edges, as clearly shown in Fig. 4, the extremity of the spacing pieces being also expanded and similarly shaped as shown at  $f$ , Figs. 1, 2, 4, and 7 to form guides for the grooved ends of the gouges and to receive the same when in a retracted position.  $g, g$  are levers mounted upon pivots  $h, h$  carried in the said plates  $a, a$  and are provided with teeth at  $i$  which teeth gear the two levers together and also engage with the teeth  $j$  on the gouges  $e, e$  as most clearly shown in Figs. 1 and 3. With this arrangement it will be understood that assuming the levers to be in the position shown in Fig. 1, and the gouges drawn back, that the movement of the said levers  $g, g$  in a direction to separate them will cause the simultaneous projection of the gouges  $e, e$  from the casing with sufficient force to cut out the horn.

Having now fully described and ascertained my said invention and the manner in which it is to be performed, I declare that what I claim is:—

1. A device for dehorning cattle, comprising a frame having plane sides and provided with guides converging toward each other, the said guides being located in the same plane within said sides, gouges movably mounted in said guides and means for moving the gouges toward each other to effect the cutting, said guides being adapted to rest against the head of the animal and limit the depth of cut.

2. A device for dehorning cattle, comprising a frame having plane sides and provided with guides extending beyond the said frame and converging toward each other in the same plane within said sides, gouges movably mounted in said guides and converging toward each other and moving in the said guides and means for moving said gouges outwardly toward each other to effect the cutting and to retract them from each other to a position within said guides.

3. A device for dehorning cattle comprising a frame composed of triangularly

shaped side pieces, and spacing pieces inter-  
posed between said side pieces, the lower  
ends of said spacing pieces being adapted  
to rest upon the head of the animal and upon  
5 either side of the horn, gouges right angu-  
larly disposed with relation to each other  
and slidably mounted in said frame, and  
means for simultaneously operating said

gouges whereby their cutting edges may be  
constantly directed toward the root of the 10  
horn.

Dated this 15th day of July A. D. 1909.

GERALD ARTHUR WINDUS.

Witnesses:

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G. F. NELSON.