

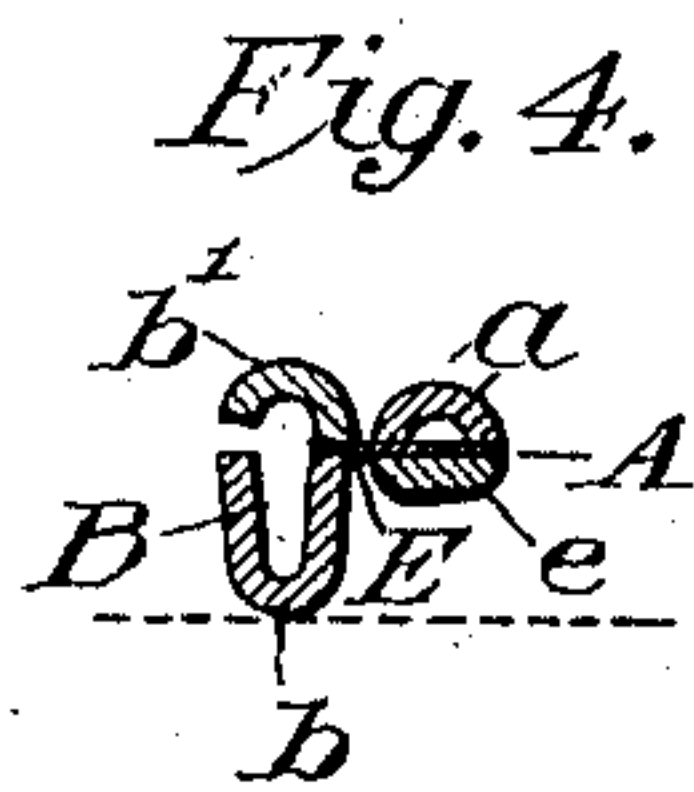
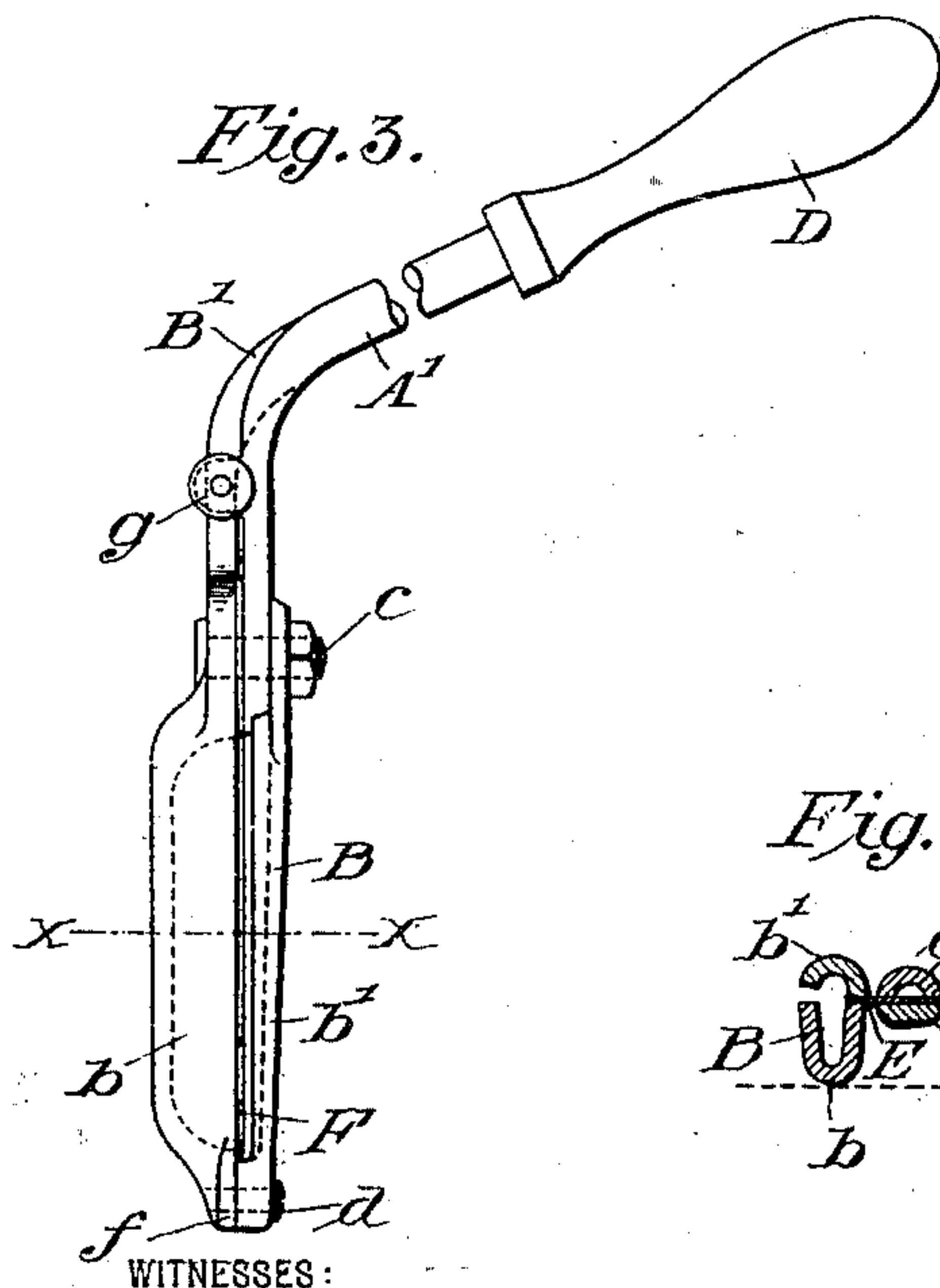
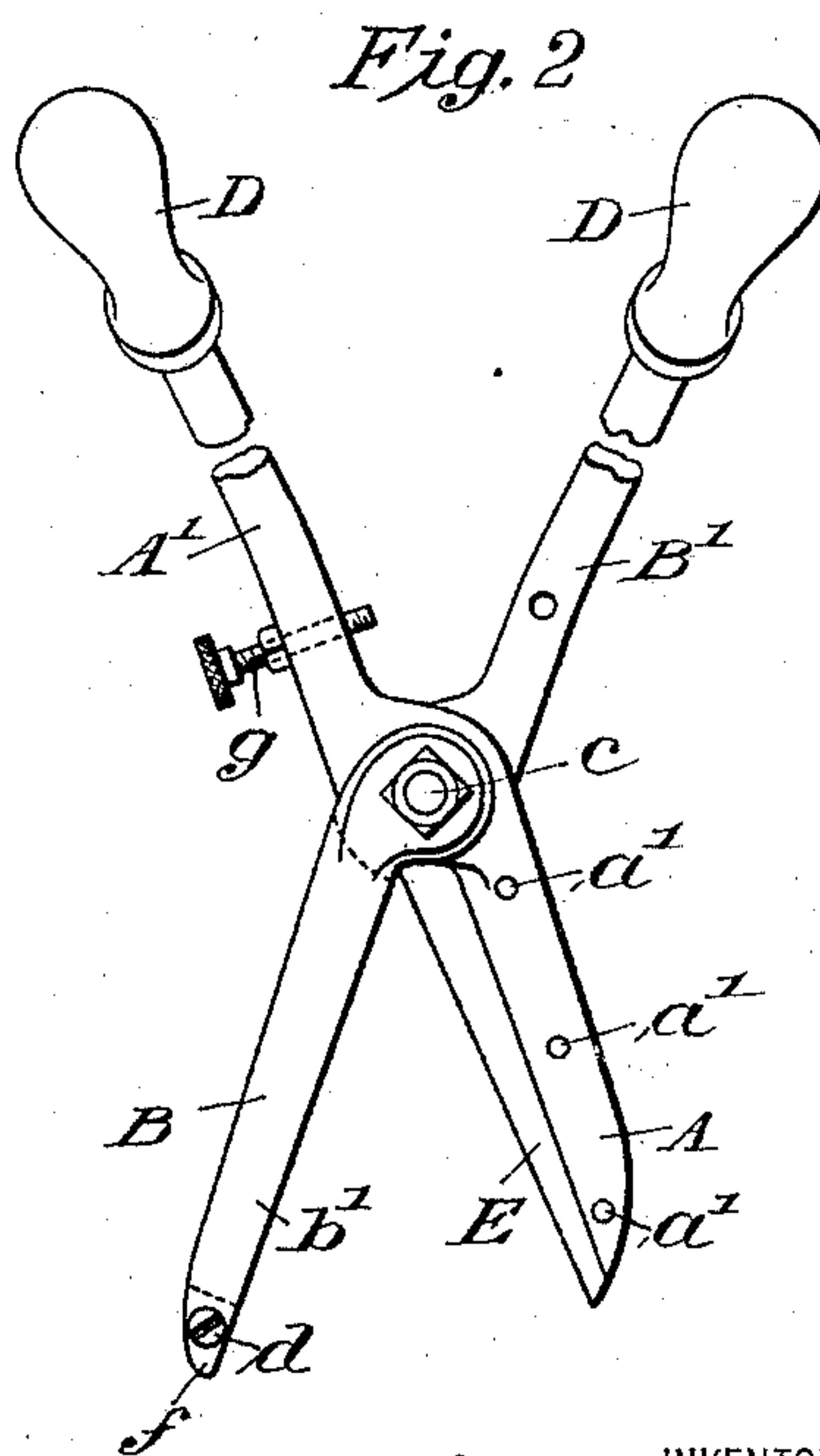
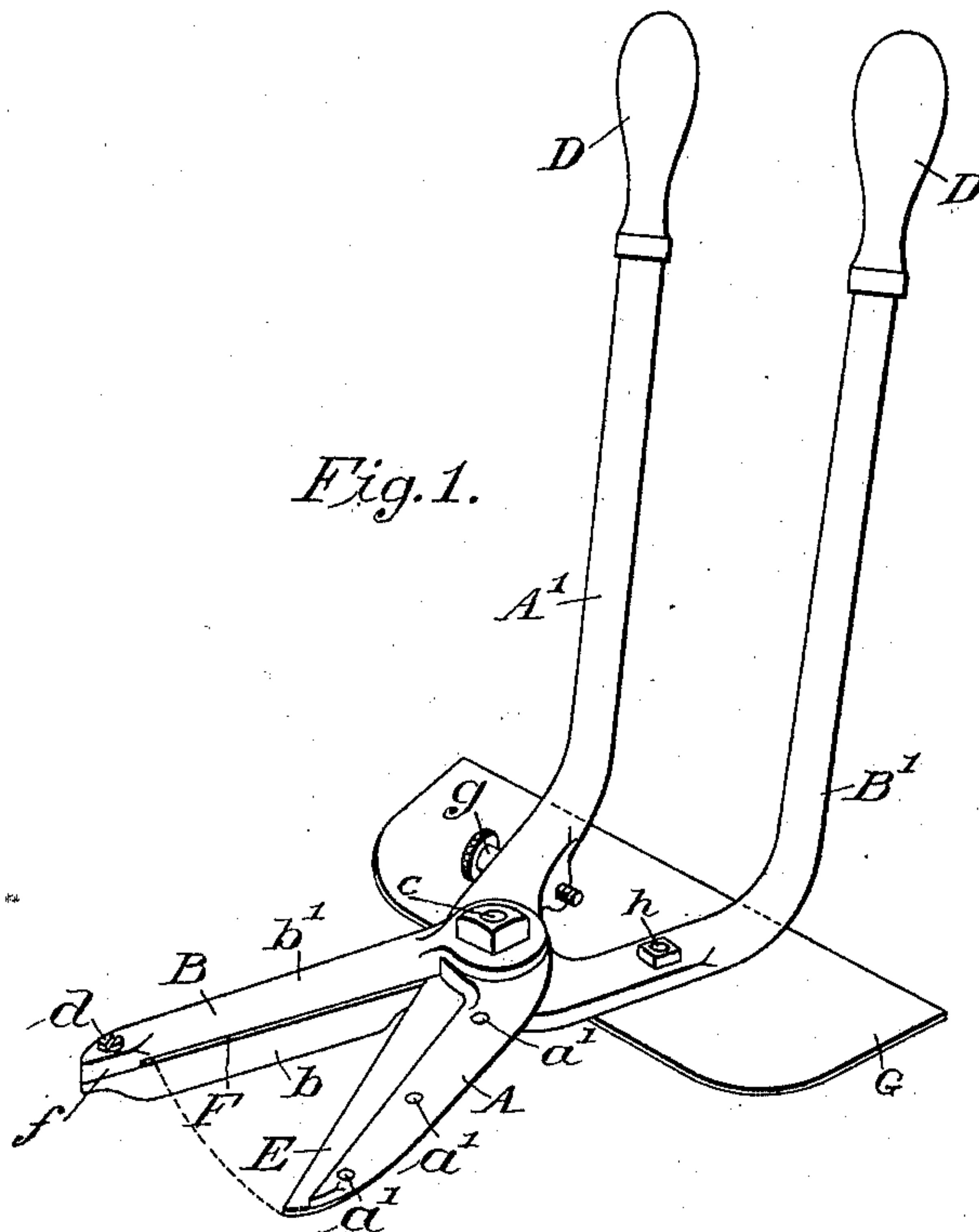
No. 634,946.

Patented Oct. 17, 1899.

C. KIESER.  
GRASS CUTTER.

(Application filed Dec. 12, 1898.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES KIESER, OF BALTIMORE, MARYLAND.

## GRASS-CUTTER.

SPECIFICATION forming part of Letters Patent No. 634,946, dated October 17, 1899.

Application filed December 12, 1898. Serial No. 698,963. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES KIESER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Grass-Cutters, of which the following is a specification.

My invention relates to improvements in grass-cutters.

Among the objects of my invention are, first, that the grip-handles are made to project upward at an angle to the cutting plane of the blade, which enables the operator to stand when operating the cutter; second, that one of the jaws is provided with an under guide, by which an evenness of the grass is maintained after cutting, and also an outward-projecting guard to prevent the point of the blade from being injured should the cutter be run against a wall, brick border, or any other object in the act of cutting; third, that the cutting-blade on its under surface is provided with a reinforce-plate in order to strengthen the blade and prevent it from buckling when securing it to the jaw or in case a stick, stone, or other object be caught between the jaws in the act of cutting; fourth, that an adjustable stop is provided to regulate the distance the cutting-blade shall enter the rectangular slot.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved cutter. Fig. 2 is a plan view of the same. Fig. 3 is an edge view of the cutter. Fig. 4 is a cross-section taken on the line X X of Fig. 3.

Similar letters of reference are employed to denote corresponding parts in each of the figures respectively.

The letter A designates the jaw carrying the cutting-blade E, and B the jaw having the rectangular slot F, through which the cutting-blade operates.

C is a screw bolt and nut for connecting the jaws together and serves as the fulcrum, and D the wooden grip-pieces.

The jaw A has a convex upper surface *a*, which affords lightness of weight and gives the jaw great strength, said jaw A being cast integral with one of the handles A'. This jaw A carries a double-edge cutting-blade E,

which is secured thereto by screws *a'* or other suitable means. The blade E on its lower surface is provided with a reinforce-plate *e* and is held thereto by the same means which secures the said blade to the jaw A. This plate strengthens the cutting-blade and prevents the same from buckling when securing it to the jaw or in case a stick, stone, or other object be caught between the jaws in the act of cutting.

The jaw B consists of two sections *b b'*, one above the other, the lower section *b* being cast integral with one of the handles B', the two sections being secured together by the bolt and nut C at one end and by a screw *d* or other suitable means at the other end. The upper and lower sections of the jaw B have their facing surfaces concave, as shown in Fig. 4, thereby making the jaw light in weight and also giving to it great strength. Between the two sections of the jaw B is formed a rectangular slot F, through which the cutting-blade E operates, said blade fitting closely therein, both upper and lower edges of the said slot forming cutting edges, thereby insuring a clean cut. The rectangular slot extends through the jaw B and is made larger at the back of the jaw, as shown in Fig. 4, to allow the grass that enters through the front of the slot to drop out freely from the back.

The jaw B is made longer than the jaw A, thereby forming a guard *f*, which prevents the point of the cutting-blade from being injured should the cutter be run against a wall, brick border, or any other object in the act of cutting.

The cutter is also provided with a foliage-guide G, which is secured to one of the handles by a bolt and nut *h* or any other suitable means. This plate G is particularly adapted for use when cutting hedges. The guide G, resting on the foliage already cut, maintains an even surface.

It will be seen that when the cutter is being operated the lower surface of the section *b*, being lower than any other part of the cutter, rests on the ground and serves as a guide for the same, also serving to maintain a uniformity of the grass after being cut.

The handles A' and B' of the cutter project at an angle to the cutting plane of the blade



E, as shown in Figs. 1 and 3, and are provided with suitable wooden grip-pieces D. By having the handles project at an angle to the cutting plane of the blade the operator is enabled to stand when operating the cutter.

In cutters of this class, in which the handles project upward at an angle to the cutting plane of the blade, the blades have a tendency to lift from each other when being operated and are thereby not kept in close contact with each other, which prevents a clean cut and makes the device objectionable. This objection is overcome by the use of the double-edge cutting-blade working through the rectangular slot throughout its entire length, thereby preventing the lifting of the blades from each other and insuring a clean cut of the grass. By this combination a double utility is secured—namely, a clean cut and the advantage of the operator being permitted to stand erect when operating the device.

One of the handles is provided with an adjustable screw *g*, as shown in Figs. 1, 2, and 3, to regulate the distance the cutting-blade shall enter the slot when the handles are brought together in order to secure or maintain a proper depth of entrance for the said blade as the same is worn away in sharpening.

From the foregoing description and the accompanying drawings the operation will be obvious.

Having thus described my invention, what I claim is—

1. In a grass-cutter the combination with the jaws, A, and, B, of a removable double-edge cutting-blade attached to one jaw, and the other jaw provided with a rectangular slot, said slot being formed between two separable sections having their facing surfaces concaved.

2. In a grass-cutter the combination of the jaw, A, having a double-edge cutting-blade,

E; the jaw, B, consisting of the two sections, *b*, *b'*, the said two sections having their facing surfaces concave; and a rectangular slot F between said two sections.

3. In a grass-cutter the combination of the jaw, A, having a double-edge cutting-blade, E; the jaw, B, consisting of the two sections, *b*, *b'*, the said two sections having their facing surfaces concave; a rectangular slot, F, between said two sections; and handles projecting at an angle to the cutting plane of the blade.

4. In a grass-cutter the combination of the jaw, A, having a double-edge cutting-blade, E; the jaw, B, consisting of the two sections, *b*, *b'*, the said two sections having their facing surfaces concave; a rectangular slot, F, between said two sections; and an adjustable screw on one handle for determining the distance the cutting-blade shall enter the said slot.

5. In a grass-cutter the combination of the jaw, A, having a double-edge cutting-blade, E; the jaw, B, consisting of the two sections, *b*, *b'*, the said two sections having their facing surfaces concave; a rectangular slot, F, between said two sections; and the rest-plate, G, attached to one of the handles.

6. The combination of the jaws, A, and, B, each provided with cutting edges; handles for operating said jaws; and a rest-plate, G, attached to one of the handles at the rear of the jaws, the resting-surface of said plate being parallel with the cutting plane of the jaws, whereby the device is permitted to rest on the foliage already cut.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES KIESER.

Witnesses:

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ROBT. GIPSON.