J. POTTER.

LEATHER CUTTING GAGES.

No. 180,633. Patented Aug. 1, 1876.

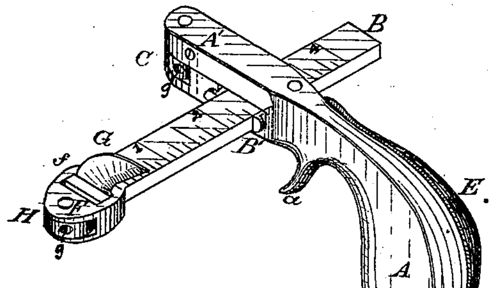

Fig.1

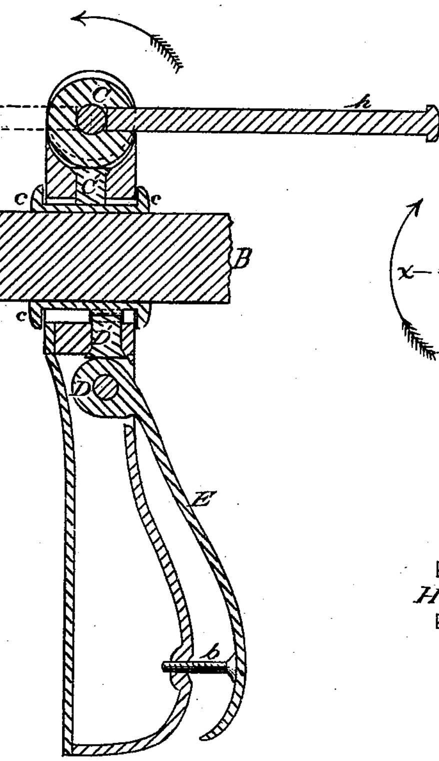

Fig.2

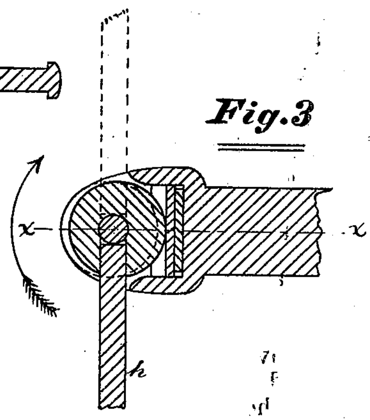

Fig.3

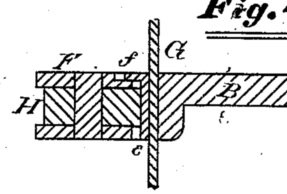

Fig.4

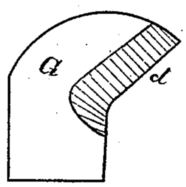

Fig.5

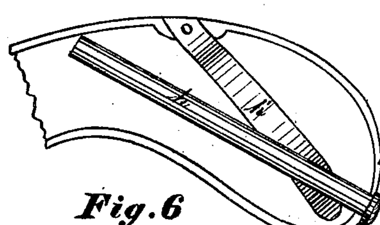

Fig.6

Attest

[illegible]

Inventor

James Potter

UNITED STATES PATENT OFFICE.

JAMES POTTER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN LEATHER-CUTTING GAGES.

Specification forming part of Letters Patent No. **180,633**, dated August 1, 1876; application filed June 6, 1876.

To all whom it may concern:

Be it known that I, JAMES POTTER, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Gages for Cutting Leather, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the tool complete; Fig. 2, a central horizontal section of the same; Fig. 3, a central horizontal section through the head of the gage-bar; Fig. 4, a section on the line *x x*, Fig. 3; Fig. 5, a separate view of the knife-blade; and Fig. 6, a section of the handle, showing the lever as held therein.

Like letters denote corresponding parts in each figure.

The object of my invention is to provide a draw-gage for cutting leather, in which the gage-bar can be readily adjusted and firmly held at any point, the cutting-knife made easily removable, but rigidly fixed in position for use, and the handle adapted for adjustment to suit the hand of the operator, producing a convenient, compact, and efficient tool.

My invention therein consists in the means employed for securing the gage-bar in its handle and rendering it readily adjustable; secondly, in the means for adjusting the size of the handle; and, further, in the combination of the lever for operating the cams placed in the handle and the spring for retaining it therein.

In the drawings, A represents the handle of the tool, extended to form a head, A′. The handle is of convenient shape to fit the hand, and is preferably, with the head, cast in two pieces, secured together so as to leave the handle hollow. The particular purpose of the hollow handle, besides giving lightness and cheapness to the implement, will be described hereinafter. A finger-hook, *a*, may be cast with the handle to give a better gripe. B is the gage-bar, which slides in a slot, B′, in the head A′, and has suitable graduations cut in its face. The gage-bar is held in the head and adjusted to any desired point by the following means: A cam, C, is placed in the end of the head, and adapted to be turned therein, and bears upon a pin, C′, which projects into the slot B′. D is another cam, which is placed in the end of the handle and on the other side of the slot B′, and bears upon a pin, D′, extending into the said slot on the opposite side from the pin C′. This cam D is turned by a lever, E, the end of which forms the cam, which lever projects over the handle A, and is grasped by the hand in taking hold of the handle. This lever E also serves the purpose of adjusting the size of the handle, so that only one size of tool will have to be made to fit a large or a small sized hand, by the movement of a screw, *b*, tapped into the handle under the lever.

The pins C′ D′ may press directly upon the gage-bar; or suitable gibs *c* may be placed in the slot, to receive the pressure from the pins and transmit the same to the gage-bar.

The head F of the gage-bar is enlarged, and in it is removably secured the cutting-knife G. This knife is constructed, as shown in Fig. 5, with the cutting-edge *d* inclined forward, so that the leather, in being cut, will be drawn down to the gage, and by making a drawing cut the knife can be operated easier.

The shank of the knife is placed in a slot, *e*, in the head F, and a cam, H, similar to the cam C, presses against the knife, or a suitable intervening gib, *f*. Each of the cams C and H is provided with a hole, *g*, in which a lever, *h*, is entered for operating such cam. This lever *h*, when not in use, is adapted to enter a hole in the end of the handle, and is prevented from falling out of the handle by a leaf-spring, *h′*, secured therein.

The operation of my device is as follows: The gage-bar is adjusted to the desired length. This is done by turning the cams C and D, or either of them, but is more conveniently accomplished by having the cam C so turned that, when the lever is closed on the handle or the adjusting-screw, the gage-bar will be held rigidly, and by raising the lever the said gage-bar will be released sufficiently to allow of its adjnstment.

The adjustment of the size of the handle, before referred to, is quite a prominent feature of my device, avoiding the necessity of manufacturing more than one size of the tool, as heretofore.

The advantages of my device are too appa-

rent, upon inspection, to need further enumeration.

Having thus fully described my device, what I claim as new therein, and desire to secure by Letters Patent, is—

1. In a gage for cutting leather, the combination of the sliding gage-bar and a lever actuating a cam, for the purpose of holding the said bar at any point, substantially as described and shown.

2. In a gage for cutting leather, the combination, with the sliding gage-bar, of a cam bearing upon one side of the same, and another cam, actuated by a lever, bearing against the other side of the said bar, substantially as described and shown.

3. The combination, with the handle, of the lever E and the screw *b*, for the purpose of adjusting the size of the said handle, substantially as described and shown.

4. In a gage for cutting leather, the combination of the lever *h* for operating the cams, adapted to be inserted in the handle, and the spring *h'* for retaining the said lever therein, substantially as described and shown.

Witnesses: JAMES POTTER.
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