

(No Model.)

S. BRAY.
GLASS CUTTER.

No. 506,466.

Patented Oct. 10, 1893.

Fig. 1.

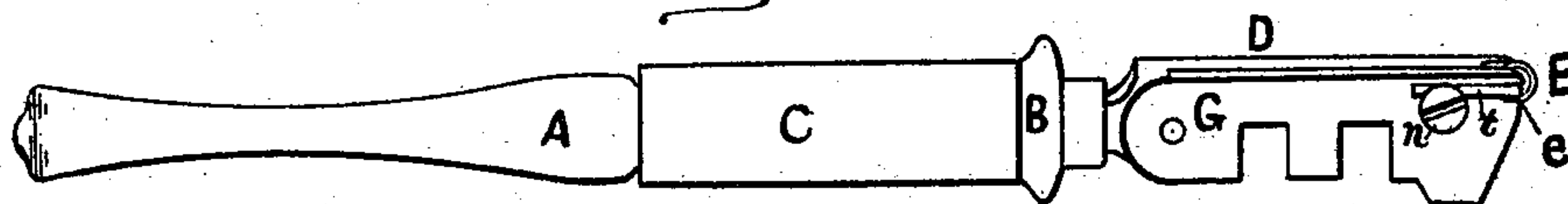


Fig. 2.

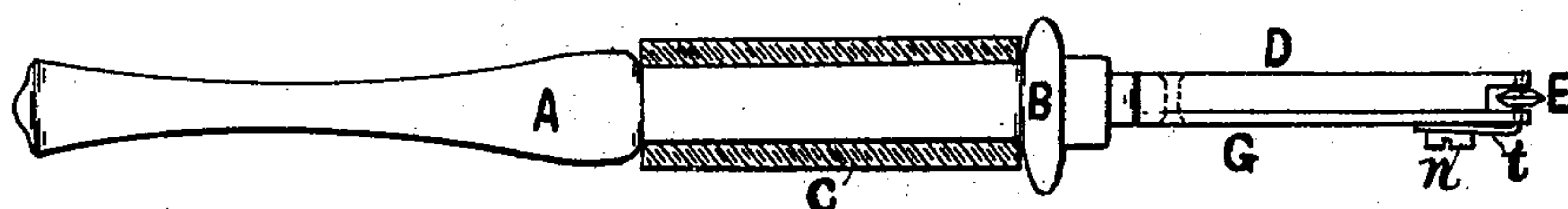
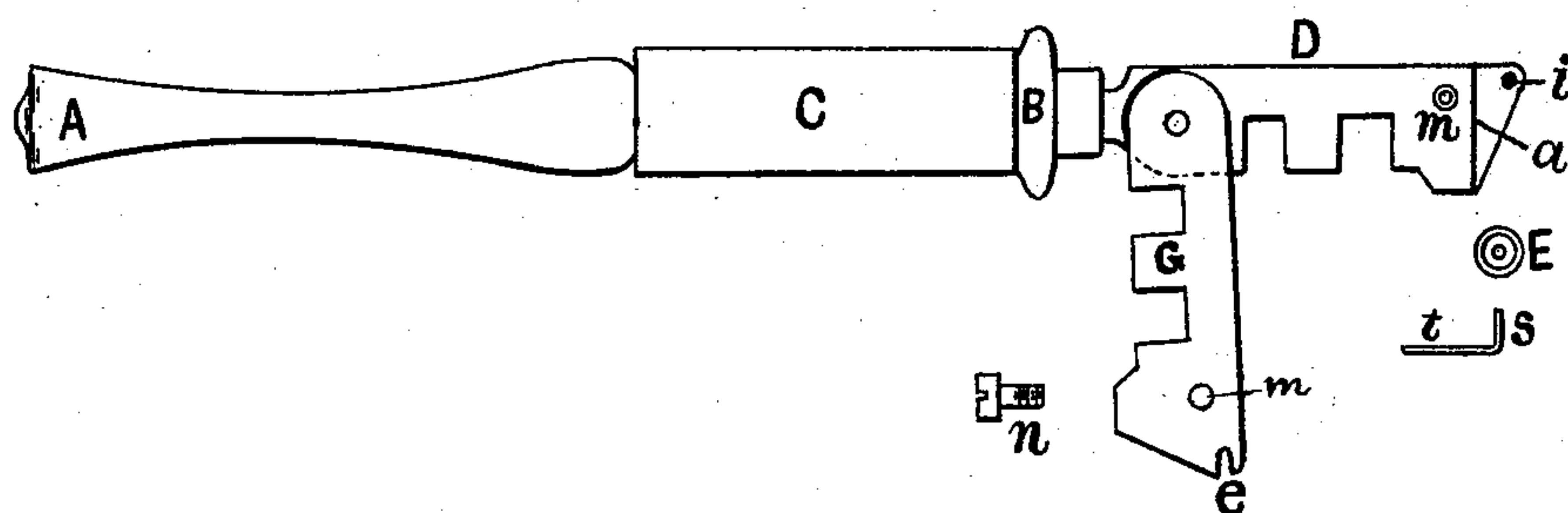


Fig. 3.



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UNITED STATES PATENT OFFICE.

SANFORD BRAY, OF SOMERVILLE, MASSACHUSETTS.

GLASS-CUTTER.

SPECIFICATION forming part of Letters Patent No. 506,466, dated October 10, 1893.

Application filed March 1, 1893. Serial No. 464,293. (No model.)

To all whom it may concern:

Be it known that I, SANFORD BRAY, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Glass-Cutters, of which the following is a specification.

My invention relates more particularly to that class of glass cutters provided with a rolling steel cutter-wheel, adapted for cutting rough or rolled glass. The smaller sizes of wheels very soon wear off and have to be replaced by new ones, which requires considerable time and trouble when the pivots of the wheels are riveted as is usually done.

The object of my invention is to provide a simple and convenient means whereby the worn out cutter-wheels may be quickly and easily removed and new ones readily inserted and secured in position for use without the aid of special tools or a skilled mechanic; also to provide means for renewing the worn away sides of the cutter-block without having to renew the whole tool; and my invention consists in the construction, combination and arrangement of the different parts of the device as hereinafter more particularly described and claimed.

In the drawings, Fig. 1 is a perspective view of a glass cutter constructed according to my invention, in position ready for use. Fig. 2 is a front elevation partly in section. Fig. 3 is a side elevation showing the parts disconnected and removed preparatory to changing a worn cutter-wheel for a new one.

A represents the handle which is formed of wood or metal, B, a boss on the handle, and C, a rubber sleeve on the finger-grasping portion of the handle. The cutter-block D is formed with a slot in its end within which the steel cutter-wheel E is pivoted on the journal S. This journal S has an arm *t* bent at right angles with the journal, extending backward and resting against the side of the block. A clamping screw *n* screwed into the hole *m* in the side of the block secures the journal firmly in position without riveting the ends. When a wheel is worn out and it is desired to remove it, the clamping screw may be simply loosened and the journal readily withdrawn and a new wheel substituted for the

old one, and the journal secured as before. The end of the block becomes worn off at the corners, more or less, by use, and in order to save the necessity of an entirely new block when so worn, I prefer to make the block with a removable or pivoted side-plate G on at least one side, as shown in the drawings. One side-wall of the end slot within which the cutter-wheel is pivoted is formed by the thinned projecting portion which extends beyond the shoulder *a* and having a hole *i* adapted to receive one end of the journal *s*. The other side-wall of the slot is formed by the projecting end of the side-plate G. The side-plate G may have a journal hole corresponding to hole *i* in the projecting end of the block D, but I prefer, instead, a slot *e*. When the ends become worn the shoulder *a* may be filed back and the slot *e* made deeper and the hole *i* made anew; or slotted also like slot *e*.

If desired, the cutter-block could be composed of three thicknesses instead of two as already described, in which case there would be a plate with projecting end corresponding to plate G on the opposite side, the middle plate being shorter and its end forming the shoulder *a*.

It will be evident that the plate G may be made shorter, and the block D formed with a shoulder which fits the end of the plate, so that only a single screw need be employed, the screw *n* serving both to clamp the pivot or bent journal *s* *t*, and to hold the plate G in a rigid position with the cutter-block D.

What I claim as my invention is—

1. A cutter-holder consisting of the combination of a cutter-block with slotted end adapted to receive a cutter-wheel, a journal for the cutter-wheel having its bearings in the walls of said slot and having a bent arm, and a clamp-screw whereby the journal may be secured firmly in position, and removed to allow a change of cutter-wheels, substantially as described.

2. In a glass cutter, the combination of a cutter-block composed, in part, of a removable side-plate, the combination block having a slotted end adapted to receive a cutter-wheel, a cutter-wheel within said slot, a journal for the cutter-wheel having its bearings

in the walls of said slot and having a bent arm and a clamp-screw whereby the journal may be secured firmly in position, and removed to allow a change of cutter wheels, substantially as described.

3. In a glass cutter the combination of a cutter-block composed in part of removable side-plates, the combination block having a slotted end adapted to receive a cutter-wheel, and a cutter-wheel with a journal having its bearings within the walls of said slot, substantially as described.

4. In a glass cutter, the combination of a

cutter-block composed in part of a removable side-plate provided at its end with a slotted journal bearing, the combination block having a slotted end adapted to receive a cutter-wheel, a journal for the cutter-wheel having a bent arm, and a clamp-screw bearing on said arm whereby the journal may be secured in position, and removed to allow a change of cutter wheels, substantially as described.

SANFORD BRAY.

Witnesses:

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