

(No Model.)

M. SWARTOUT.

TYPE CLEANING BRUSH FOR TYPE WRITING MACHINES.

No. 441,906.

Patented Dec. 2, 1890.

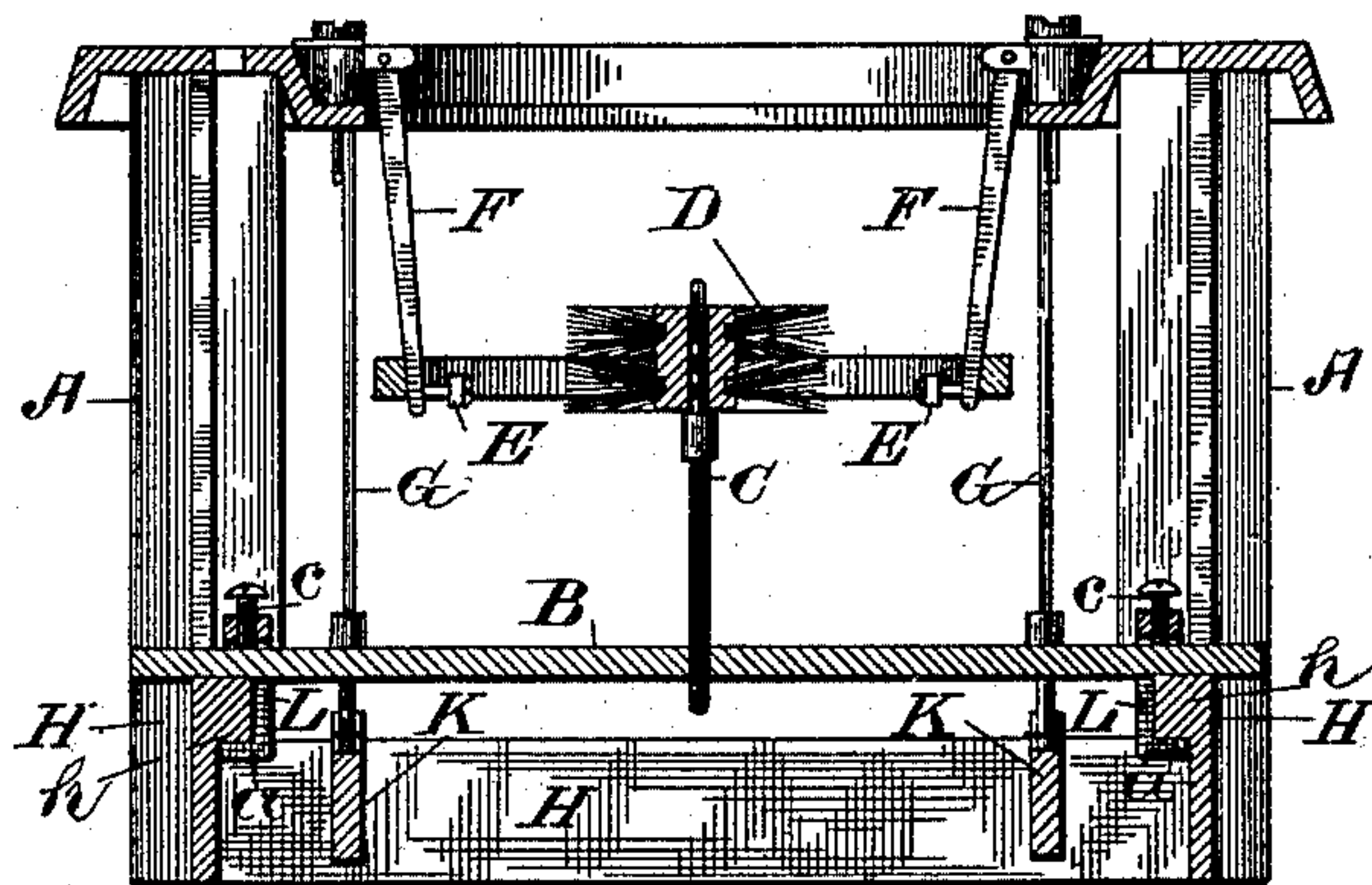


Fig. 1.

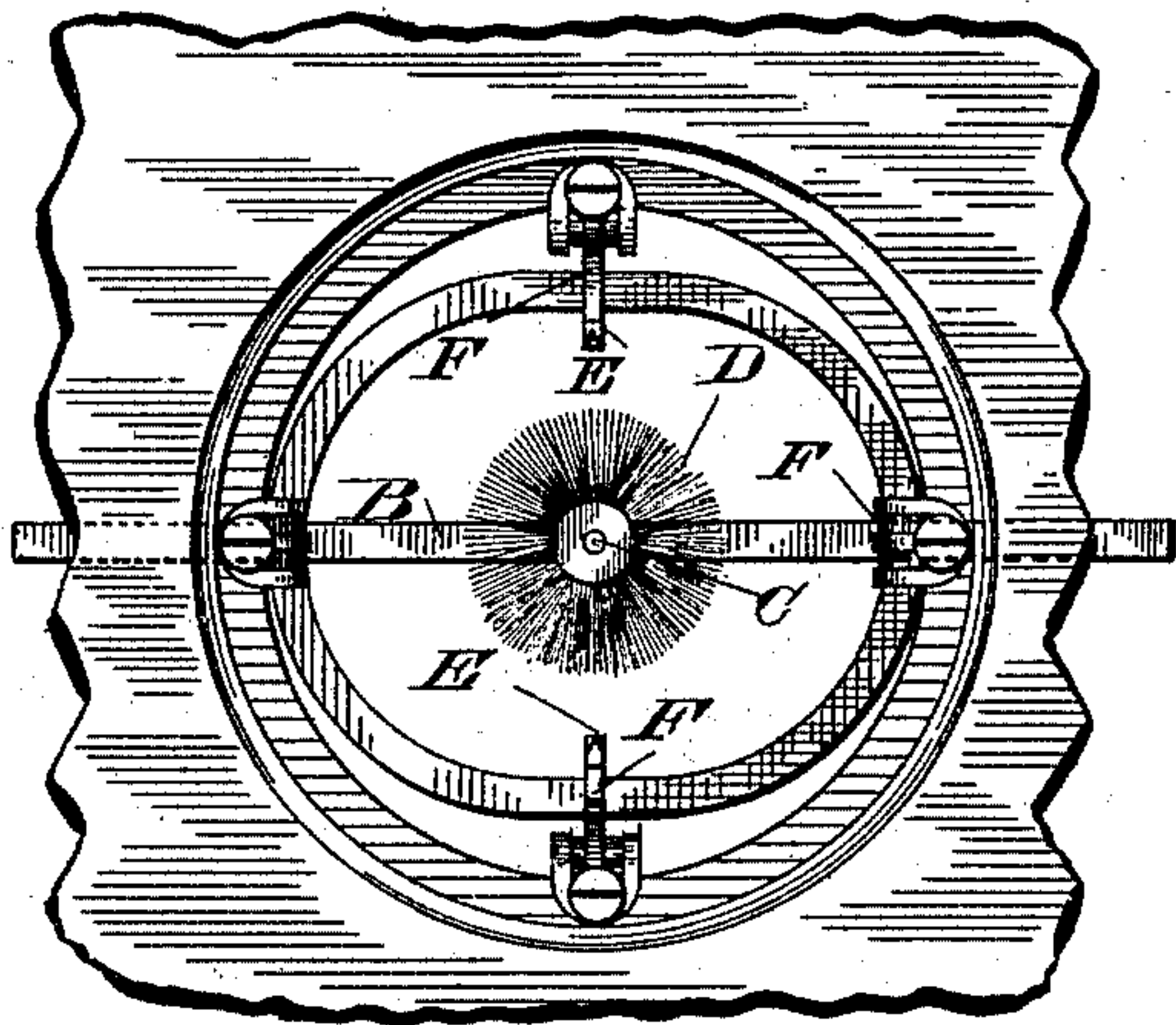


Fig. 2.

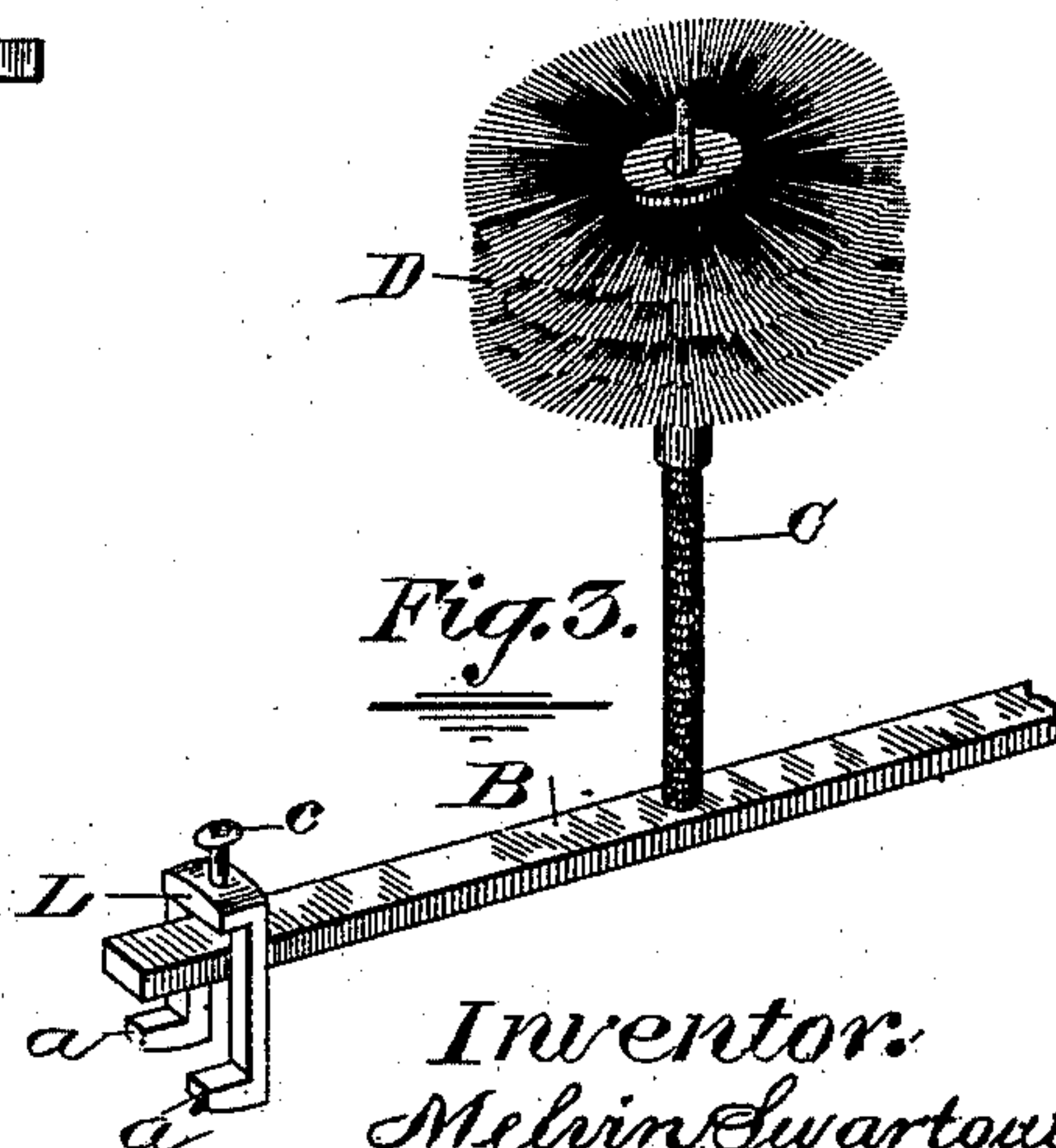


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

MELVIN SWARTOUT, OF TORONTO, CANADA, ASSIGNOR OF ONE-HALF TO
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TYPE-CLEANING BRUSH FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 441,906, dated December 2, 1890.

Application filed August 11, 1890. Serial No. 361,671. (No model.)

To all whom it may concern:

Be it known that I, MELVIN SWARTOUT, stenographer, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Type-Cleaning Brushes for Type-Writing Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

The object of the invention is to devise an automatic type-cleaning brush suitable for any form of type-writing machine having a type well or basket, which may be cheaply manufactured, and which will, owing to its simplicity, be impossible to get out of order; and it consists, essentially, of suitably attaching to a convenient part of the frame of a type-writer a cross-bar which supports an upright or standard carrying a type-cleaning brush located centrally in the basket and above the level of the type when at rest.

Figure 1 is a vertical cross-section of as much of a common form of type-writing machine as is necessary to illustrate my means of supporting the type-cleaning brush and attaching the same to the machine. Fig. 2 is a plan view of basket and brush. Fig. 3 is a perspective view of the type-cleaning brush, standard, cross-bar, and U-shaped clamp.

Like letters of reference refer to like parts throughout the specification and drawings.

A refers to the frame of the machine, and B to the cross-bar supporting the standard C, carrying the type-cleaning brush D.

E refers to the type; F, to the type-bars; G, the connecting-wires; K, the key-levers; H, the base of the machine.

It will be noticed by reference to Fig. 1 that the cross-bar B is connected to the base H of the type-writing machine by a U-shaped clamp L, having outwardly-projecting feet *a* fitting under the flange *h* of the base H. This clamp L is fitted with a set-screw *c* for the purpose of holding the cross-bar B tightly against the base H of the frame A, and securely in the position in which it is placed. This cross-bar B passes between the connecting-wires G, so as not to interfere with the freedom of their movements when in action.

At or near the center of the cross-bar B is a tapped hole, through which passes a threaded standard C, carrying a type-cleaning brush D. The object of employing a threaded standard

and tapped hole is to adjust the type-cleaning brush to any desired height.

The brush D is usually adjusted so as to permit the bristles to lie in a plane above the level of the type or characters on the type-bar when in their lowest position.

The brush D, it might be stated, is loosely journaled upon the standard C, so that when it is struck by the type or type-bars in their upward or downward movement it will freely revolve upon the said standard and prevent any uneven wear in any one point of the bristles of the said brush.

This invention consists only in arranging a brush to clean the types or characters on the type-bar in their upward and downward action.

By simply using a cross-bar supporting a standard carrying a type-cleaning brush, the head of which is less than any of the shorter axes of the type-wells, and which will permit a free movement of the type-bars when in action, I can attach my device to a type-writing machine having type well or basket at a minimum cost. It is possible to connect the standard C to the base H of the type-writing machine by other means than that of supporting it on the cross-bar B.

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

1. In a type-writing machine, the combination, with a vertically-adjustable standard, of a brush loosely mounted upon the upper end of said standard and rotatable by the action of the type-bars during the operation of writing, substantially as set forth.

2. In a type-writing machine, a cross-bar B, having formed therein a tapped hole to receive a threaded standard C, carrying a type-cleaning brush D, loosely journaled thereon, substantially as and for the purpose set forth.

3. In a type-writing machine, the combination of a cross-bar B, a standard C, type-cleaning brush D, and U-shaped clamp L, having outwardly-projecting feet *a* and set-screw *c*, substantially as and for the purpose set forth.

Toronto, July 23, 1890.

MELVIN SWARTOUT.

In presence of—

GUSTAVE H. PRIEST,
CHARLES H. RICHES.