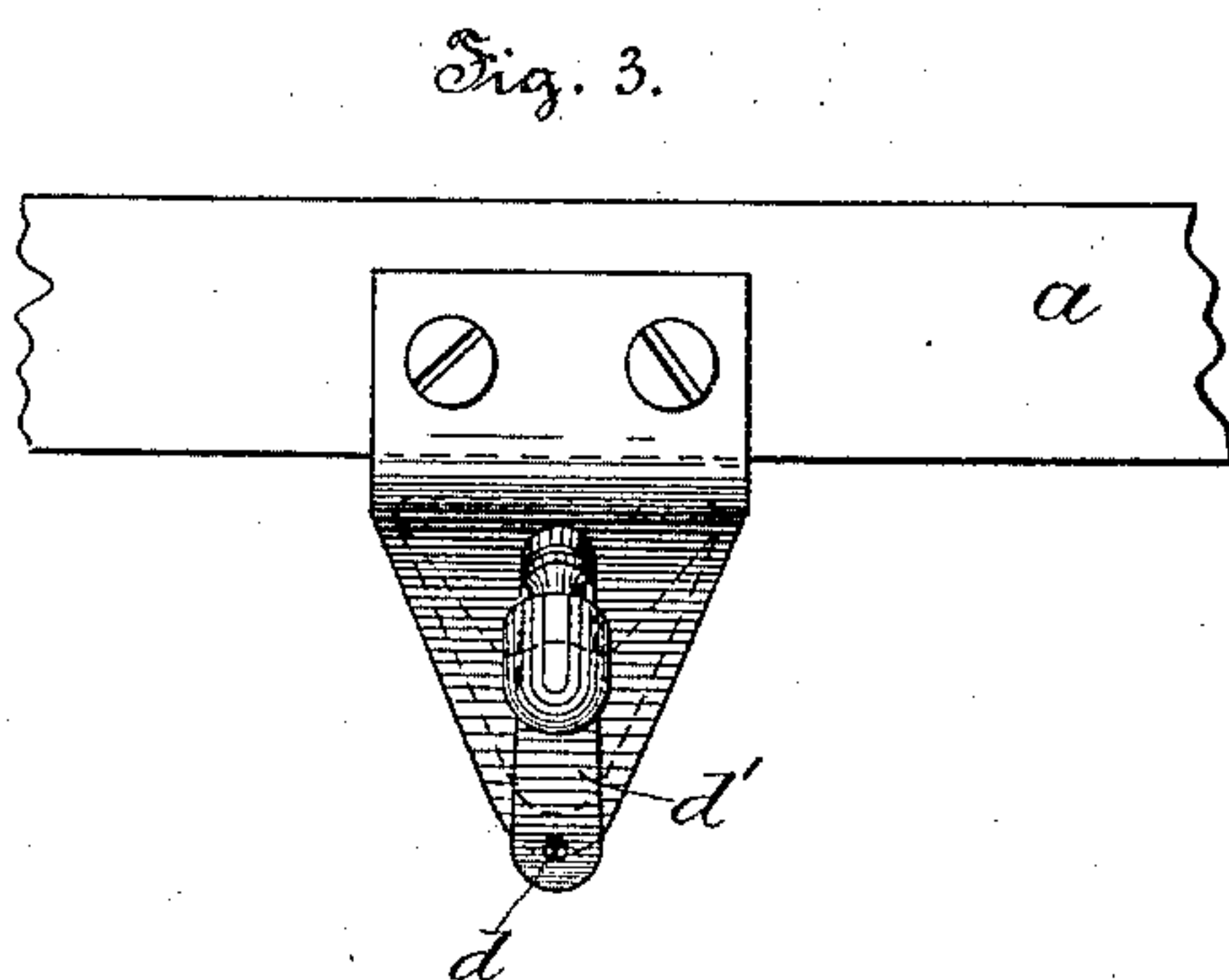
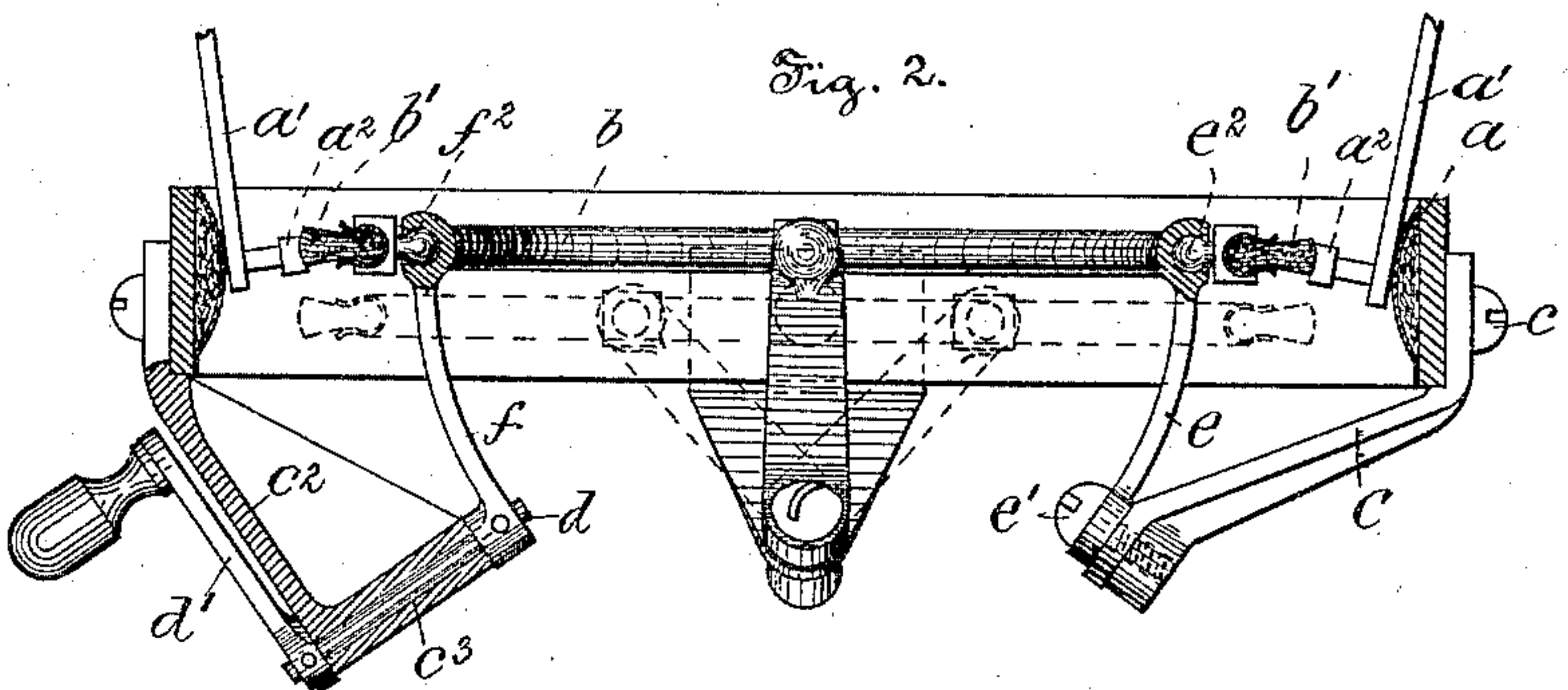
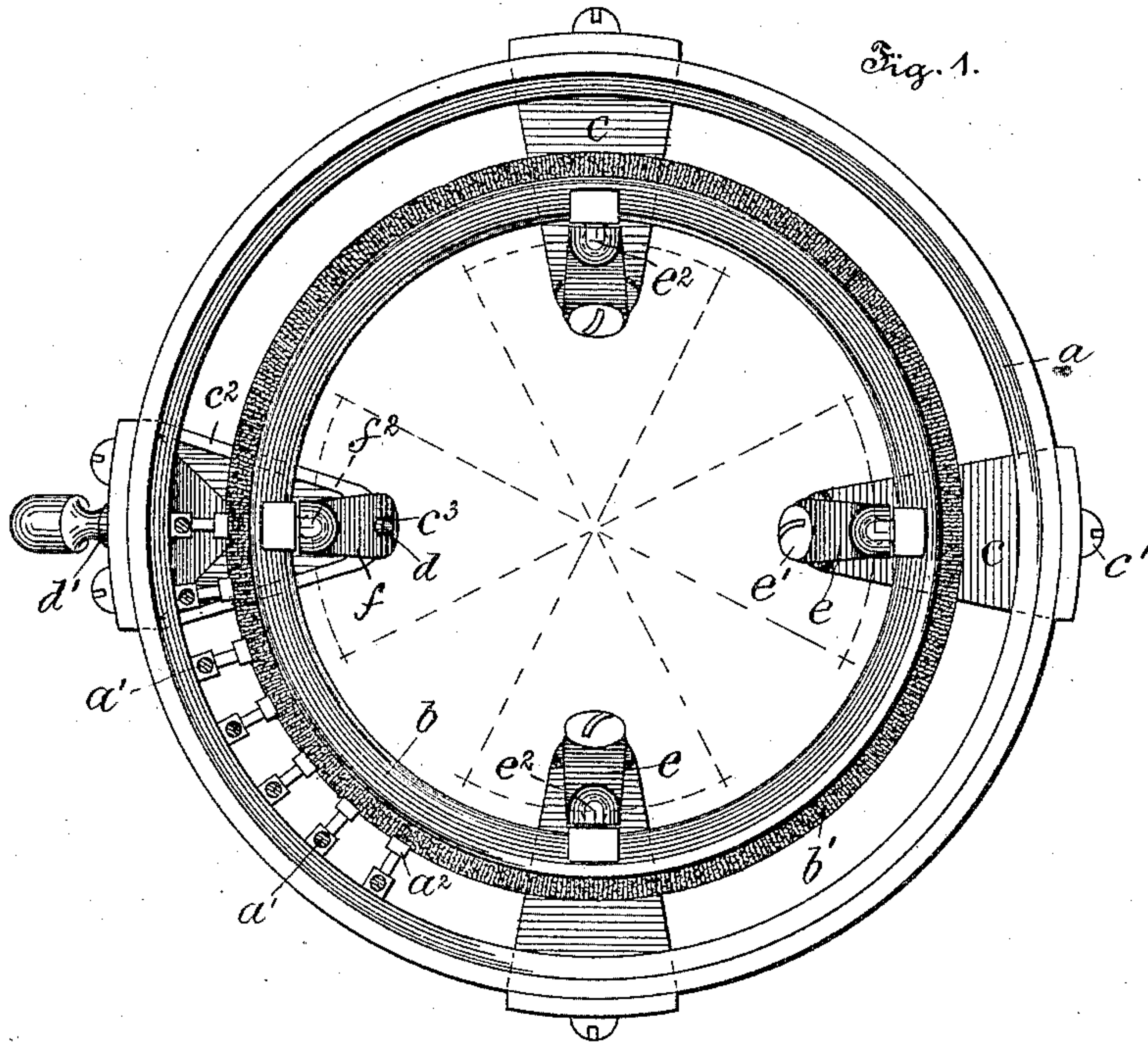


(No Model.)

C. A. CONKLE & J. A. McCULLOCH.
TYPE WRITING MACHINE.

No. 434,919.

Patented Aug. 26, 1890.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES A. CONKLE AND JOHN AUSTEN McCULLOCH, OF PHILADELPHIA,
PENNSYLVANIA.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 434,919, dated August 26, 1890.

Application filed May 22, 1890. Serial No. 352,794. (No model.)

To all whom it may concern:

Be it known that we, CHARLES A. CONKLE and JOHN AUSTEN McCULLOCH, both citizens of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

It is well understood by type-writing-machine operators that the type in use soon fill with fuzz and dust and become coated with ink by repeatedly contacting with the ink-ribbon, and such condition of the type is easily detected by the absence of well-defined and clear letters in the finished print. Although several appliances have been suggested for obviating the above-mentioned result, still these appliances have not been employed in practice, and it has generally been customary to clean the type by raising the type-bar rods singly, holding the elevated type-bar rod in the hand, and then picking out the accumulation of fuzz, dust, and ink with an ordinary pin or other similar instrument, and finally brushing the type with a stiff brush. Although good results have been attained in practice in the manner above described, still the operation of picking and brushing the type one by one has been not only tedious and unpleasant, but has required the useless consumption of a great deal of time, so that a simple, durable, efficient, and practical attachment for cleaning the type has long been a desideratum.

The object of the present invention is to obviate the above-mentioned disadvantages and to provide inexpensive, durable, and efficient means for rapidly and thoroughly cleaning the type of a writing-machine at the same time.

The invention consists of a frame or hoop having bristles, sponge, or other suitable material attached to the periphery thereof and with means for raising, lowering, and slightly rotating said frame or hoop, so that the bristles, sponge, or other preferred material will readily and thoroughly cleanse the type; and the invention further consists of mechanism for depressing said hoop or frame beneath the basket of type and for elevating said hoop

into a position for use, as is hereinafter more fully described.

The nature and characteristic features of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a top or plan view of the central portion of a type-writing machine having the paper-carriage, top plate, and key-levers removed therefrom and showing a circular frame provided with radially-projecting bristles, sponge, or other preferred type-cleaning material adapted to contact with the type, and also the means for raising, lowering, and slightly rotating said frame or hoop. Fig. 2 is a transverse sectional view through the type-rest, showing in full lines a type-cleaning frame in operative position in contact with the type, and in dotted lines the type-cleaning frame depressed for permitting of the actuation of the type-writing machine, and also means attached to the type-rest for raising, lowering, and slightly rotating said type-cleaning frame; and Fig. 3 is a front elevation of the mechanism and hand-crank attached to the type-rest and type-cleaning hoop for actuating the latter.

In the drawings, α is a type-rest supported at or near the bottom of the basket of type in the usual or in any preferred manner.

α' are type bars or rods constituting the basket of type. α^2 are type-blocks attached to said type bars or rods.

b is a circular frame or hoop having bristles, sponge, or other suitable material b' projecting radially from the periphery thereof.

c are brackets, preferably four in number, extending inwardly and attached to convenient portions of the type-rest α by means of set-screws c' , or in any other preferred manner. The bracket c^2 is somewhat extended and is provided with a journal c^3 , for a purpose to be presently described.

d is a shaft pivotally mounted in the journal c^3 and provided with a hand-crank d' , projecting beyond and between the links (not shown) connecting the type bars or rods and finger-keys, so as to be accessible from the exterior of the machine.

e are links pivotally attached at one ex-

tremity thereof to the brackets *c* by means of the screws *e'*, and at the opposite extremity thereof to the circular frame *b* by means of the ball-and-socket joints *e*², in order that the circular frame *b* may be depressed and slightly rotated by turning the links *e* into the position indicated by the dotted lines in Fig. 2.

f is an arm attached by means of a ball-joint *f*² at one extremity to the circular frame *b* and rigidly at the opposite extremity to the shaft *d*, so that the circular frame *b* may be depressed or elevated into operative position and slightly rotated by simply turning the hand-crank *d'*, as will be readily understood.

In use the circular frame *b* is located near the bottom of the basket of type, and in such position with relation thereto that when the frame *b* is depressed the type swing clear, and when the frame *b* is elevated the bristles, sponge, or other suitable material *b'* is in contact with the printing-faces of the type. Whenever it becomes desirable or necessary to clean the type, the circular frame *b* is elevated by means of the hand-crank *d'* until the bristles, sponge, or other material *b'* contacts with the type. The crank *d'* is then turned a little distance, first in one direction and then in the other, whereby the frame *b* is slightly rotated, thereby rubbing, brushing, and thoroughly cleansing the printing-faces of the type. When the type are sufficiently clean, the hand-crank *d'* is turned farther in one direction than in the other, whereby the frame *b* is depressed sufficiently to permit the type bars or rods *a'* to swing clear of the frame *b*. Of course the material *b'* may be used wet or dry, and may consist of bristles, sponge, felt, or other analogous material. However, good results have been attained in practice by the employment of bristles or dry felt, and therefore preference is given to such material or materials.

Although the invention has been described with reference to a type-writing machine having a circular basket of type, still it will be obvious to those skilled in the art to which the invention appertains that it may be applied to other types of writing-machines by simply making some modifications or slight changes in the details thereof without, however, departing from the spirit of the invention.

Having thus described the nature and objects of our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a type-writing machine, of a basket of type, a type-rest, a frame provided with type-cleaning material and pivotally connected with links supported by said type-rest, and means for elevating, depressing, and slightly rotating said frame, substantially as and for the purposes set forth.

2. The combination, in a type-writing machine, of a type-rest, brackets attached thereto, a frame provided with type-cleaning material, links pivotally attached to said frame and brackets, and means for turning said links in respect to said rest and frame, substantially as and for the purposes set forth.

3. The combination, in a type-writing machine, of a type-rest, brackets attached thereto, a frame provided with type-cleaning material, links pivoted to said brackets and frame, a shaft journaled in one of said brackets, a hand-crank and arm attached to said shaft, and said arm pivoted to said frame, substantially as and for the purposes set forth.

In witness whereof we have hereunto set our signatures in the presence of two subscribing witnesses.

CHAS. A. CONKLE.

JNO. AUSTEN McCULLOCH.

Witnesses:

THOMAS M. SMITH,

RICHARD C. MAXWELL.