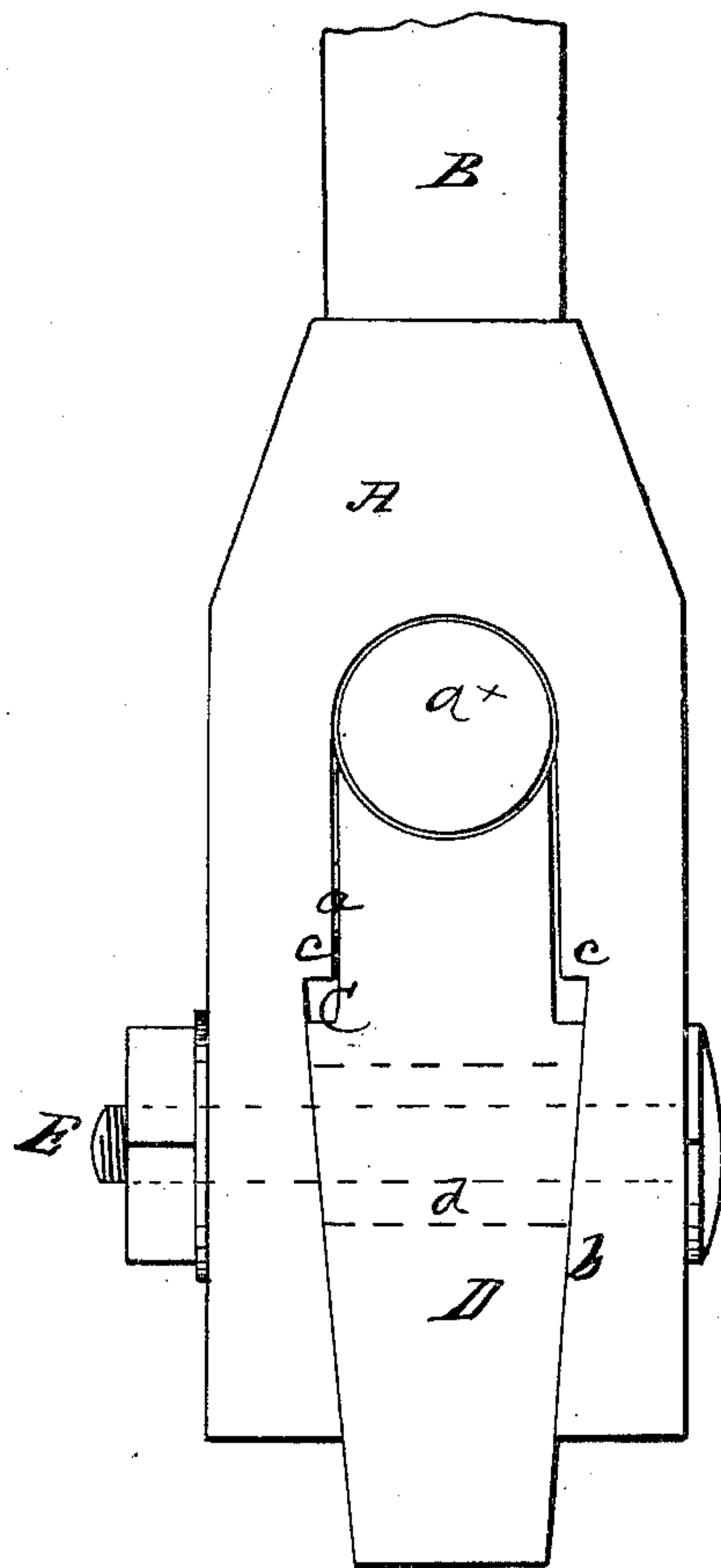


No. 27,588.

PATENTED MAR. 20, 1860.

G. WESTINGHOUSE.
CRANK BOX.



Witnesses:

Wm Combs
R. S. Spencer

Inventor:

Geo Westing house
per Murray &
allman

UNITED STATES PATENT OFFICE.

GEORGE WESTINGHOUSE, OF SCHENECTADY, NEW YORK.

IMPROVEMENT IN CRANK-BOXES.

Specification forming part of Letters Patent No. 27,588, dated March 20, 1860.

To all whom it may concern:

Be it known that I, GEORGE WESTINGHOUSE, of Schenectady, in the county of Schenectady and State of New York, have invented a new and useful Improvement in Crank-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, said drawing being a side view of my invention.

This invention consists in a novel way of securing the slide in the box, whereby the slide may be readily adjusted and the box properly fitted to the crank-wrist, and the slide at the same time firmly secured in position without the liability of being thrown out from the wrist during the rotation of the same.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the body or main portion of the crank-box, which is formed at the end of the shaft B, and has a slot, C, made in it longitudinally. This slot at its inner part, *a*, has parallel sides, and has a concave semicircular inner end. The outer part or portion, *b*, of the slot is made of dovetail shape, and shoulders *c c* are formed at the junction of the parts *a b* of the slot. The outer part of the dovetail portion of the slot is the narrowest, as shown clearly in the drawing, the slot gradually increasing in width to the shoulders *c c*.

D is a slide, which is fitted in the slot C, and is made of corresponding form, as shown clearly in the drawing. This slide has its inner end made of concave, semicircular form, corresponding with the inner end of the slot, and forming with it a complete circle. The slide D has an oblong slot, *d*, made through it, as indicated by the dotted lines, and a screw-bolt, E, passes through the body of the crank-box and the oblong slot in the slide D.

From the above description it will be seen that the wrist *a^x* of the crank is fitted between the end of slot C and the slide D, and that the latter is held securely in proper position by the dovetail slot and the bolt E, the latter preventing any lateral misplacement of the slide, and the dovetail slot preventing its outward movement. The oblong slot *d* in the slide admits of the adjustment of the same to compensate for wear. As the end of the slide D that bears against the wrist *a^x* wears the wear may be taken up or compensated for by relaxing the screw-bolt E, driving inward the slide, so that its inner end will bear snugly against the wrist *a^x*, and then screwing up the bolt E, the slotted end of the box A possessing sufficient elasticity to permit the slide to be firmly clamped in the box on screwing up the bolt. By this arrangement a very simple crank-box is obtained, and the slide D may not only be readily adjusted to the wrist of the crank, but also kept snugly to the wrist without the liability of being removed or thrown outward therefrom by its revolutions. The keys which are usually employed to hold the slide require to be fastened in order to prevent a casual loosening of the same, and if a set-screw be used additional plates are required for bearings for the same, involving additional cost.

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

The slide D, fitted within the dovetail slot C of the body A of the box, in connection with the screw-bolt E, passing through the body A and an oblong slot in the slide, substantially as and for the purpose set forth.

GEORGE WESTINGHOUSE.

Witnesses:

S. K. CAMPBELL,
L. STEWART.