(No Model.)

A. T. BOOTH.

ADJUSTING DEVICE FOR ECCENTRICS.

No. 302,703. Patented July 29, 1884.

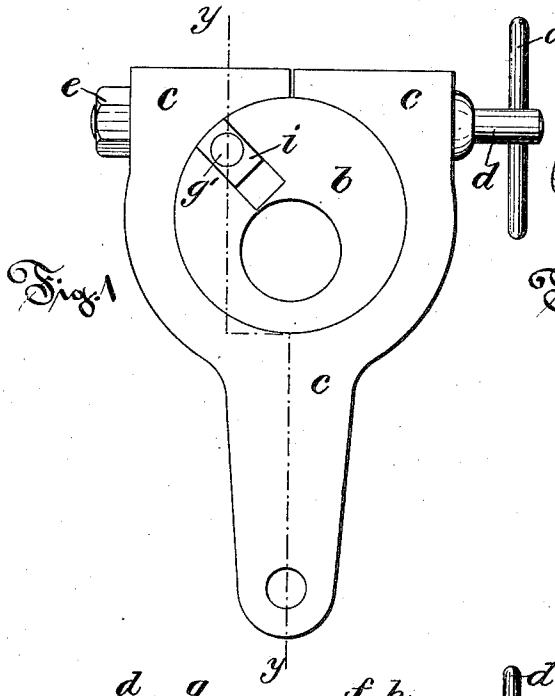


Fig. 1

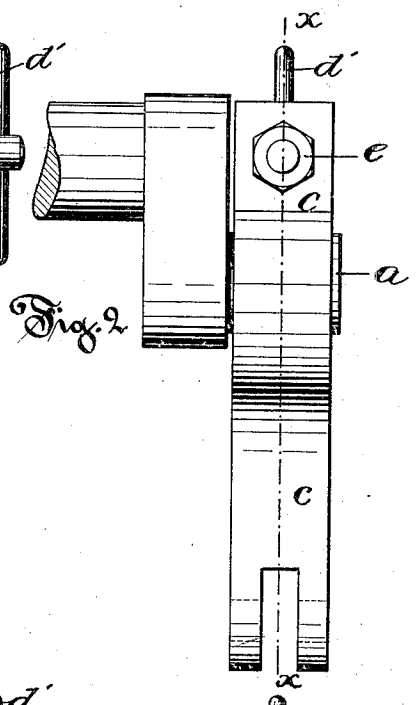


Fig. 2

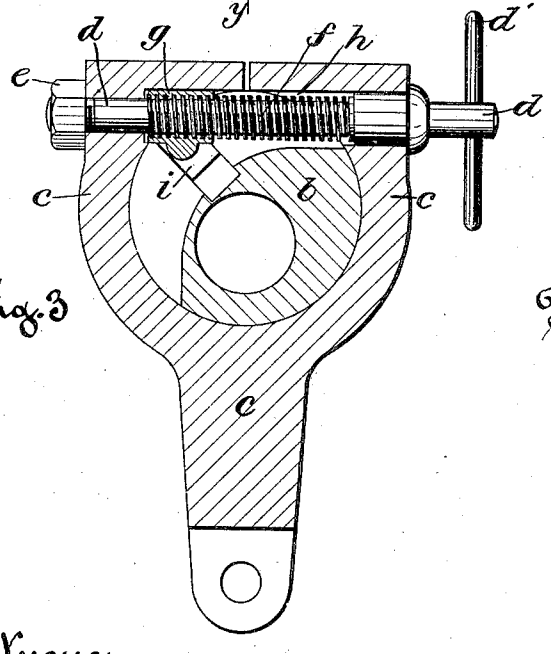


Fig. 3

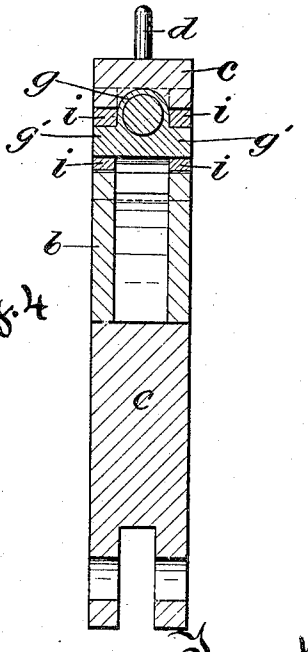


Fig. 4

Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT T. BOOTH, OF MERIDEN, CONNECTICUT.

ADJUSTING DEVICE FOR ECCENTRICS.

SPECIFICATION forming part of Letters Patent No. 302,703, dated July 29, 1884.

Application filed April 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT T. BOOTH, of Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Adjustment Devices for Eccentrics; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

Figure 1 is a front view of my invention as applied to an attachment for a press or the like. Fig. 2 is an edge view of the same, showing a crank and part of the crank-shaft. Fig. 3 is a view in longitudinal section of the device on the line *x x* of Fig. 2. Fig. 4 is a view in cross-section on the line *y y* of Fig. 1.

The object of my invention is to provide means for a ready and exact adjustment of the stroke of the platen or die in a press, so as to make up for the wear of parts, or to exactly determine the thickness of parts formed between the dies.

In the accompanying drawings, the letter *a* denotes a crank-pin; *b*, an eccentric rotarily secured upon the pin; *c*, an eccentric-strap embracing the eccentric and adapted to be compressed upon it by means of the spindle *d*, provided at one end with the shouldered head, at the other with the nut *e*. This spindle is screw-threaded, as shown at *f*, and bears the nut *g*, which is fitted closely within the socket *h*, but not so closely but that it may be moved from end to end of the socket by turning the spindle, as by means of the handle *d'*. The eccentric *b* has a peripheral mortise extending a little more than half-way around it in order to leave room for the spindle and nut *g*. Radial slots are also made in the eccentric *b*, in which slots reciprocate the bearers *i*, which are pivoted to trunnions *g'*, fast to opposite sides of the nut *g*. When the nut is turned firmly against the strap, the eccentric is clamped, and the distance between the center of the crank-pin *a* and the pivot *c'*, by which the strap is secured to the connecting-rod, remains constant while the machine to which the parts are attached is in operation. In order to change this distance, the nut is loosened and the spindle rotated, so as to cause the nut to slide in the socket. The nut, by means of the slides which bear against the sides of the radial slots, causes the eccentric to revolve about the crank-pin, and so change the distance between the center of the crank-pin and the pivot *c'* to any desired degree that is within the eccentricity of the pin and the eccentric. By tightening the nut on the spindle, the wedge is clamped in place as before.

My invention affords a perfect and durable means of adjusting the length of the stroke of a cutting-press, die, or the like, in a manner and by means that withstand the immense pressure and hard usage of the devices to which it is applicable.

It is obvious that my invention is applicable to various machines; and I do not limit it to the class herein shown and described.

I claim as my invention—

1. In combination, an eccentric-strap, *c*, bearing in a socket at the end of its arms the rotary screw-threaded spindle *d*, a nut, *g*, with connected bearers *i*, eccentric *b*, with peripheral mortise and radial slots, and the crank-pin *a*, all substantially as described.

2. The combination, with an eccentric-strap bearing a threaded clamping-spindle, of an eccentric having radial slots supporting bearers for the trunnions of a nut borne on the threaded shaft of the clamping-spindle, all substantially as described.

ALBERT T. BOOTH.

Witnesses:
JOHN Q. THAYER,
ROGER M. FORD.