(No Model.)

J. S. ROBINSON.

TREADLE ATTACHMENT.

No. 362,539. Patented May 10, 1887.

Fig. 1.

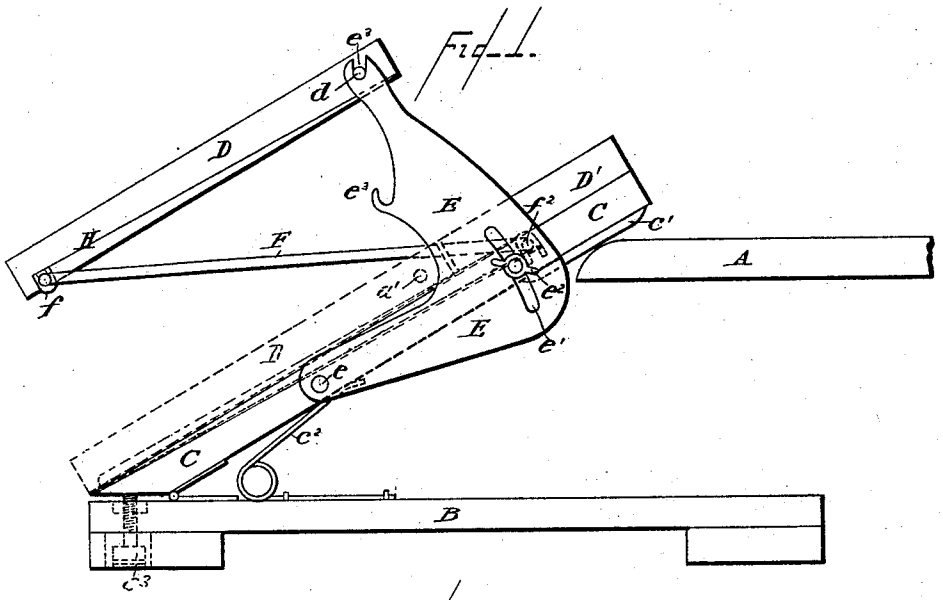
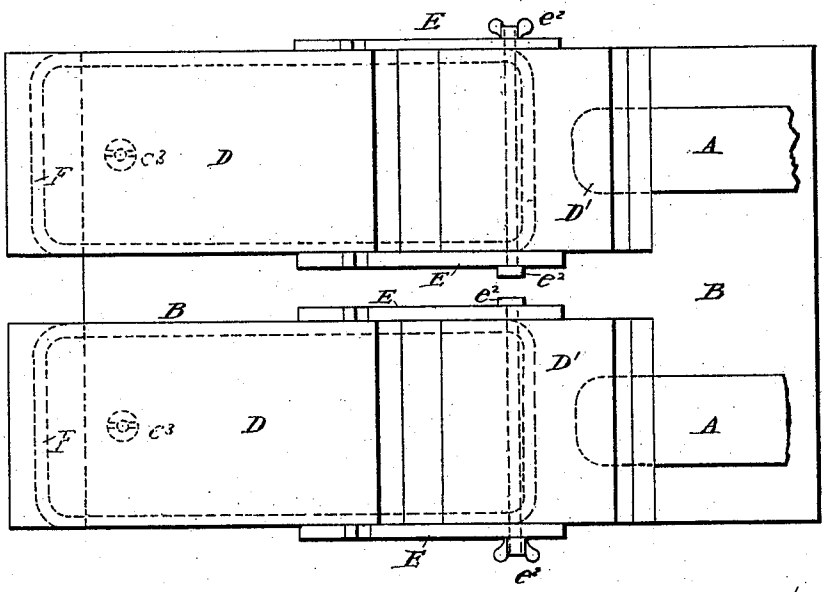


Fig. 2.



WITNESSES.

Norris A. Clark.

Ledru R. Miller

INVENTOR.

J. S. Robinson

per Hallock & Pollock

Attys.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JAMES S. ROBINSON, OF JAMESTOWN, NEW YORK.

TREADLE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 362,539, dated May 10, 1887.

Application filed June 30, 1886. Serial No. 206,710. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. ROBINSON, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Treadle Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention consists in certain improvements in treadles for various purposes, particularly for organs, sewing-machines, &c., and treadles for operating the pedals of pianos, as will be hereinafter fully set forth, and pointed out in the claims.

My invention is illustrated in the accompanying drawings, as follows:

Figure 1 is a side elevation of my device in position to operate the pedals of a piano. Fig. 2 is a top view of the parts as shown in Fig. 1.

A A are the outer ends of the pedal-levers of a piano, no other part of the instrument being shown.

B is a platform which supports treadles C, which rest on the said pedal-levers.

In organs or other instruments or machines which are operated by a treadle the part B will be omitted, the part C being the treadle in that instance of the instrument or machine. The parts mounted on C will be the same as shown, whether the part C is the actual treadle of a machine or organ or is a special treadle mounted on a platform, B, as shown, for operating upon the pedal of a piano, and hence no further illustration is required than that given in Figs. 1 and 2. It will therefore be understood that the parts mounted on the treadle C constitute the essential features of my device, while the remaining parts are simply for the adaptation of those features to a special use—viz., the operation of a piano-pedal.

The construction is as follows: On each of the treadles C there is a foot-board, D D′, of which D is adjustable vertically, while D′ is fixed to the treadle; but, if desired, this foot-board may be in one piece and made adjustable the same as D is. The reason for not making the whole foot-board adjustable is that when it is raised up it is carried forward and may interfere with other parts of the machine, and as it is only raised up for the use of a small person, who would of course have a short foot, there is necessity for only a part of the foot-board being made adjustable.

It is essential, or at least desirable, that the foot-board D when raised be kept parallel with the treadle C.

The adjustable part of the foot board D is pivoted, near its heel at *f*, to a link, F, which is also pivoted to the treadle near its toe at f^2. On each side of the treadle, near its toe, is a bracket, E, with ratchet notches e^3, and there is a pawl-pin, *d*, on each side of the adjustable foot-board D, near its toe. The foot-board D is shown in two positions—viz., in an elevated position in full lines and down on the treadle by dotted lines—and it is easily understood how it is operated to be adjusted in any position desired.

The bracket E is pivoted to the treadle at *e*, and is secured at the opposite end by a jam-nut and bolt, e^2, which operates in a curved slot, *e′*, in the bracket. By this means the bracket can be so set that the foot-board, when elevated, shall be parallel with the treadle or have more or less incline, as may be desired.

The link F, as shown, is made of wire bent into a parallelogram form, as will be seen by observing the dotted lines in Fig. 2, and it sets in grooves in the parts to which it is pivoted, and is held there by small staples *f;* but of course this construction can be easily varied.

Where the device is to be used to operate a piano-pedal the treadle C is hinged to a platform, B, and this will set with its forward end under the pedals, and the treadles C will lie on top of the pedal, as seen in Fig. 1, A being the pedal. The under side of treadle where it rests on the pedal should be covered with a soft material—such as leather or felt—as at *c′* in Fig. 1.

In order that the device may be easily placed in position to operate the pedals, I provide a spring, c^2, to keep the treadles elevated to a proper angle, and an adjusting-screw, c^3, working up from below against the heel of the treadle, is provided to set the treadle at such an angle as will bring it upon the pedal when the device is pushed up to the pedals.

I am aware that treadles have been made having a foot-board hinged to the same at the heel, and means for elevating and supporting

the toe thereof for the purpose of adjusting the same to people of various heights; but such a construction is defective in that the whole adjustable foot-board cannot be raised bodily and supported above the treadle parallel with the same or set at any pitch desired to be operated by the foot in a natural and comfortable position.

What I claim as new is—

1. The combination, with a treadle, of a vertically-movable foot-board, a pivoted support connecting said foot-board with the treadle, so as to sustain one end of the same at various distances from the treadle, and a ratcheted bracket for supporting the other end of said foot-board, substantially as set forth.

2. The combination, with a treadle, of the foot-board D, the link F, pawl-pins *d*, and brackets E, constructed and arranged substantially as and for the purposes set forth.

3. The combination, with a treadle, of the foot-board D, link F, pawl-pins *d*, and ratcheted bracket E, having pivot *e*, slot *e'*, and binding-screw e^2, substantially as set forth.

4. The combination, with the treadles C C, of the platform B, to which said treadles are hinged, and vertically-adjustable foot-boards mounted on said treadle, substantially as set forth.

5. The combination, with the treadles C C, of the platform B, to which said treadles are hinged, and the movable foot-boards D D, mounted on said treadles and supported by the links F F, and brackets E E, substantially as set forth.

6. The combination, with the treadle C, of the platform B, hinge *c*, connecting said platform and treadle, the spring c^2, supporting said treadle at an incline to said platform, the adjusting-screw c^3, for regulating said incline, the movable foot-board on said treadle, the link F, and bracket E, for supporting said foot-board at various heights above said treadle.

7. The combination, with a treadle, of a foot-board thereon, formed of two parts, D and D', of which the part D is adjustable to various heights above the treadle, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

J. S. ROBINSON.

Witnesses:

ROBT. H. PORTER,

H. L. REYNOLDS.