No. 649,348. Patented May 8, 1900.

S. H. PIPKIN.

HAND OPERATING TREADLE ATTACHMENT.

(Application filed Jan. 4, 1900.)

(No Model.)

Fig. 1.

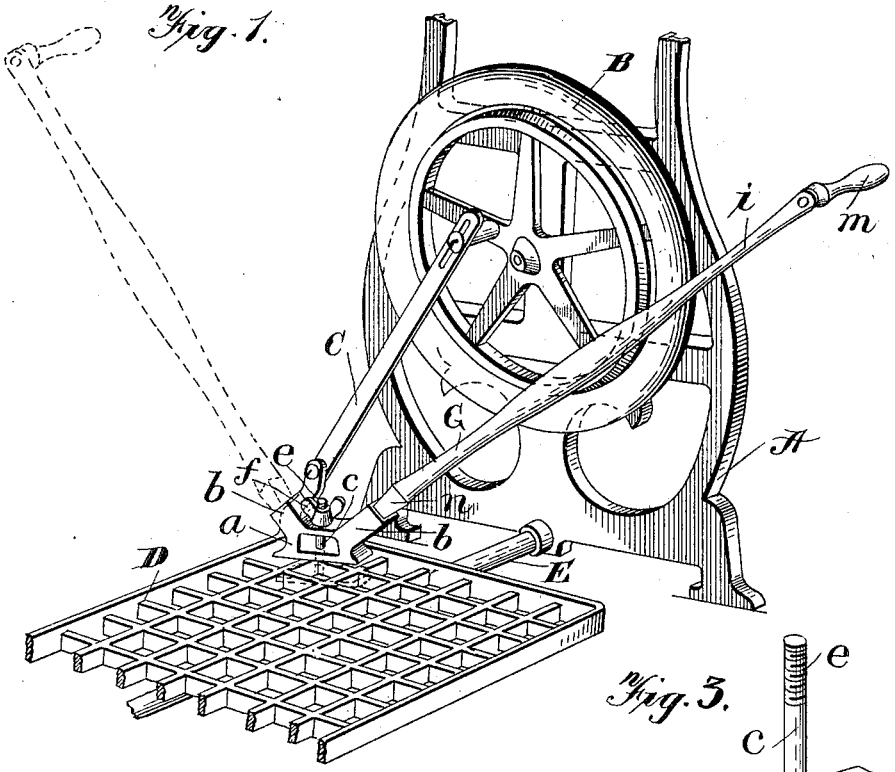


Fig. 3.

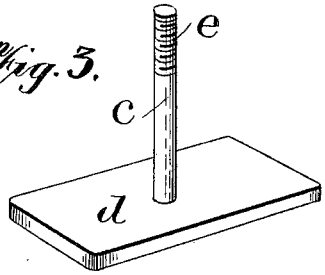
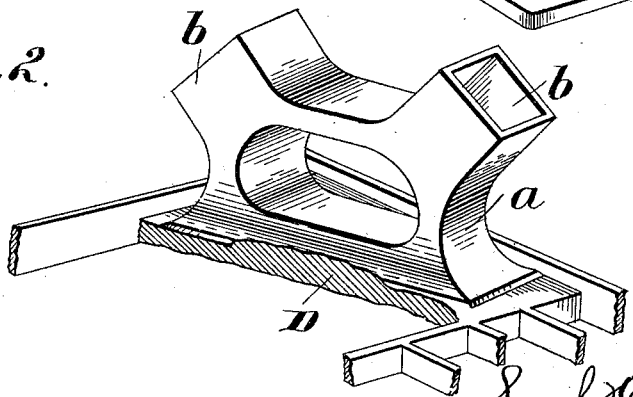


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

SARAH H. PIPKIN, OF GOLDSBOROUGH, NORTH CAROLINA.

HAND-OPERATING TREADLE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 649,348, dated May 8, 1900.

Application filed January 4, 1900. Serial No. 342. (No model.)

To all whom it may concern:

Be it known that I, SARAH H. PIPKIN, a citizen of the United States, residing at Goldsborough, in the county of Wayne and State of North Carolina, have invented new and useful Improvements in Hand-Operating Treadle Attachments, of which the following is a specification.

My invention relates to improvements in hand-operating treadle attachments and which is especially adapted to be used in connection with the treadles of sewing-machines.

In the accompanying drawings, Figure 1 is a perspective view of my invention, showing it applied to a sewing-machine treadle. Fig. 2 is a modification of my invention, wherein the handle-receiving socket is made as an integral or rigid part with the treadle instead of separate therefrom, as shown in Fig. 1. Fig. 3 is an enlarged perspective view of the socket-clamping member.

My invention is particularly intended for the use of women in the operating of sewing-machines, whereby the treadle can be operated by hand instead of by foot, thus adapting the machine to be conveniently used by those who are physically unable to operate the treadle by foot and to avoid the physical injuries consequent to the operation of sewing-machine treadles by the foot.

With this end in view the object of my invention is to provide the treadle with a simple means whereby a handle can be readily rigidly connected with the treadle at a point eccentric to its pivotal point, the handle extending outward and upwardly diagonally from the treadle, forming a handle of considerable length, whereby a great deal of leverage, and consequently power, is obtained and whereby the treadle, and in turn the machine, is operated by a slight downward pressure upon the free end of the rigid handle.

The object of my invention also pertains to so constructing the handle-receiving attachment that the handle may be inserted in the attachment to extend toward the sewer to be operated by one hand or instantly removed and rigidly attached to extend in the opposite direction—that is, away from the operator—to be operated by some other person—as, for instance, a child—thus relieving the mother of the labor consequent upon the operation of the treadle.

Referring now to the drawings, A is a part of the frame of a sewing-machine; B, the combined driving and balance wheel; C, the connected pitman; D, the treadle, and E the treadle shaft or pivot. All of these are of the usual construction, the treadle D being always of open-work for the purpose of lightness, as is well known, and which on account of its open construction enables me to readily attach and detach my handle-receiving socket to any desired point of the treadle.

My invention consists of a base portion *a*, having at its opposite ends the oppositely upwardly and outwardly inclined rigid sockets *b*. Passing transversely through the attachment between the sockets *b* is a rod *c*, having its lower end rigidly attached to a plate *d*. The rod *c* is adapted to pass, as just stated, upward through the attachment between the sockets and has its upper end screw-threaded, as shown at *e*, to receive a thumb clamping-screw *f*. The sockets and the base are connected to the opposite side of the treadle from the sewer and is preferably turned slightly at an angle, as shown, whereby the operating-handle G will extend to one side of the sewer and out of interruption with any part of her body and causing the outer and upper end *i* to be in a convenient position for the sewer to grasp the outwardly-extending handle-piece *m*, attached to the upper and outer end of the handle or rod G. The lower end of this handle or rod G is made angular, as shown at *n*, for the purpose of fitting in the correspondingly angularly formed sockets *b*, and it should be noted that the walls of these sockets *b* are rigid, whereby the handle or rod G is rigidly connected with the attachment, and thereby rigidly connected with the treadle D. By having the socket and the engaging lower end of the rod G angular the laterally-turned handpiece *m* at the upper end of the rod or handle G is always held in the proper position to be readily grasped by the hand of the operator.

When the device is to be operated by some person other than the sewer, the handle is withdrawn from the inner socket *b* and placed

in the outer socket, as shown in dotted lines, Fig. 1, where it can be conveniently operated by a child for its mother. It should also be noted that the handle or rod G, being long, extends across the pivotal point E of the treadle D and considerably beyond it, whereby a considerable leverage, and consequently power, is obtained. Owing to this construction, I find that in the operation of a sewing-machine it is only necessary for the sewer (or other person operating the handle or rod G) to put a slight downward pressure upon the handpiece *m* to obtain a sufficient power to run the machine.

While I prefer to have the sockets attachable and detachable from the treadle, whereby it is adapted to be attached to any of the machines now in use and to be adjusted thereon to any desired position to suit the operator, yet it will be understood that these sockets can be cast integral with the pedal, as shown in Fig. 2, or otherwise rigidly or removably connected with the treadle. When the treadle is constructed as shown in Fig. 2, the manufacturer thereof can cast the treadle with the sockets as a part thereof, thus practically adding little or no cost to the manufacture of the treadle.

By means of a device such as that herein shown and described I provide the treadle with a socket for rigidly connecting the handle or rod G thereto, thus enabling the sewer to use a handle as the means of resting or as a sole means of operating the machine, as may be desired. When the hand operating-handle is not in use, it is simply withdrawn from the socket, and when the machine is to be again operated it is instantly attached by simply inserting its end within one of the sockets *b*.

I am aware that a hand attachment has heretofore been provided for sewing-machines, and I am also aware that hand attachments have been connected to treadles; but so far as I know I am the first to provide the treadle with a socket having rigid walls and attached to the treadle at a point preferably eccentric to its pivotal point, whereby the operating-handle is readily and quickly inserted and withdrawn from the rigid wall socket and whereby the treadle is operated by a downward pressure upon the end of the handle.

My invention is exceedingly cheap to construct and quickly and readily attached to the machine-treadle, and the handle being independent and separate from the socket and inserted and withdrawn therefrom simply by an endwise movement it is readily and quickly placed in position for operation either by the sewer or by some one else at the opposite side of the machine, or as quickly withdrawn when the machine is not in operation for the purpose of having it out of the way and preventing its becoming injured or broken.

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

1. A treadle provided with an upwardly-extending vertical wall, said wall having rigid upper and lower horizontal bearing-faces, in combination with an operating-lever adapted to fit between said bearing-faces, substantially as described.

2. A treadle provided with an inclined upwardly-extending square socket, in combination with an operating-lever having one end adapted to enter said socket and an operating-handle extending horizontally at right angles from the lever, whereby the treadle is operated, substantially as described.

3. A treadle provided with forwardly and rearwardly extending square sockets, an operating-lever having a squared portion adapted to enter one of said sockets and a horizontal handle attached to the lever at right angles thereto, whereby the lever can be detachably inserted in either of the said sockets, substantially as described.

4. A hand-operating mechanism for sewing-machines comprising a base having rearwardly and forwardly, upwardly inclined sockets adapted to receive an operating lever or handle, said base having a vertical bolt-opening between the said sockets and adapted to rest on the top of the treadle, a clamping-bolt carrying a plate at one end adapted to engage the lower side of the treadle, said bolt extending through one of the openings therein, and the opening in the base, and a clamping-nut on the end of said bolt, whereby the base is securely clamped to the treadle, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SARAH H. PIPKIN.

Witnesses:
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