

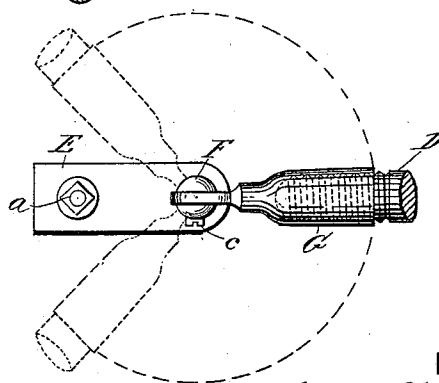
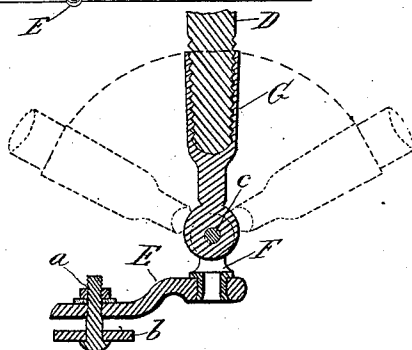
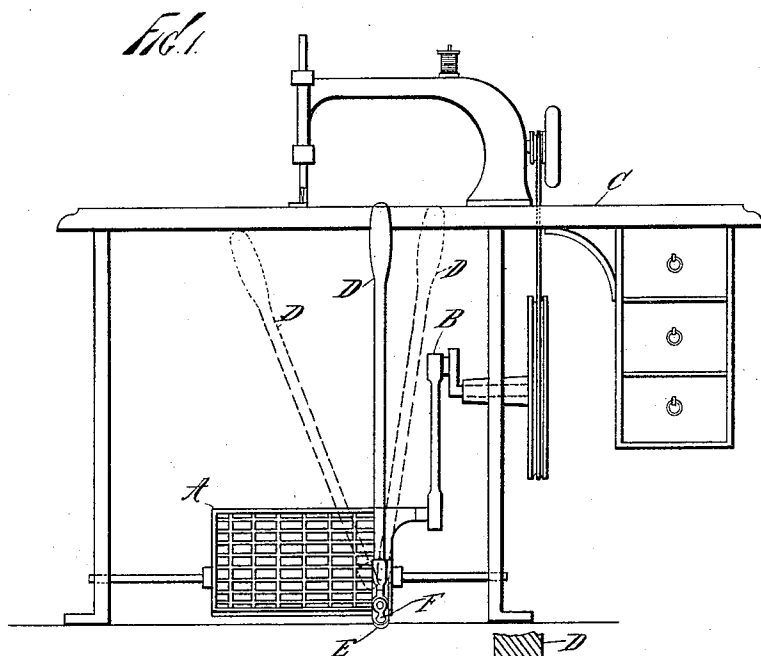
(No Model.)

J. L. GARDNER.

HAND APPLIANCE FOR OPERATING SEWING MACHINES.

No. 461,803.

Patented Oct. 20, 1891.



WITNESSES:

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JESSIE LEWIS GARDNER, OF ST. JOSEPH, MISSOURI.

HAND APPLIANCE FOR OPERATING SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 461,803, dated October 20, 1891.

Application filed May 29, 1891. Serial No. 394,607. (No model.)

To all whom it may concern:

Be it known that I, JESSIE LEWIS GARDNER, of St. Joseph, county of Buchanan, and State of Missouri, have invented certain new and useful Improvements in Hand Appliances for Operating Sewing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to appliances for operating sewing-machines by hand, and has for its object the production of a simple, cheap, and convenient form of hand-lever which may be quickly and securely attached to any desired point of the treadle, which may be inclined in any direction for convenience of the operator and operated from any point, and which will not interfere with the usual uses of the treadle when desired, thus adapting the machine to be operated by hand or foot power, or both, at the will of the operator and without requiring any alteration of the machine, being applicable to all forms of sewing-machines. To accomplish all of this and to secure other and further advantages in the matters of construction, operation, and use, my improvements involve certain new and useful features, as will be hereinafter first fully described, and then pointed out in the claim.

In the drawings, Figure 1 is an elevation intended to represent any stand and treadle of a sewing-machine with my improved hand-operating device applied to the treadle. Fig. 2 is a vertical sectional view; and Fig. 3, a plan view of the removable attachment by which the hand-lever is secured to the treadle, the dotted lines indicating various positions which the lever-socket may assume and both figures together indicating the universal movements which may be communicated to the lever attached by this improved means.

In all the figures like letters of reference, wherever they occur, indicate corresponding parts.

A represents any treadle of any sewing-machine, B a pitman for communicating movements from the treadle to the operating parts, and C the table-top.

D is a lever or handle by which the treadle may be moved by hand. To attach this lever to the treadle I employ a base-piece E and locking bolt and nut *a*. All the ordinary sewing-machine treadles are for lightness made of open-work, and I am therefore enabled to attach the base-piece E securely at any point—front or back or at either end—by use of a washer *b*, through which the bolt passes and which bears against the margins of any opening. This washer is large enough to reach across any of the openings in the treadle, and with it the bolt and nut may be used to lock and hold the base-piece firmly in place, as will be readily understood. The base-piece is preferably mounted so as to extend a little beyond the margin of the treadle; but this is not necessary.

At the end of the base-piece is a short pillar F, so mounted that it will revolve freely in its seat and yet not become detached. This forms part of a universal joint, as will be seen, and that the joint may be simple and easy to make, as well as not liable to become damaged, I pass the pillar F through the base-piece and upset the lower end, as indicated in the drawings; but other means of mounting the pillar may be adopted. In the upper end of this pillar is hinged a socket G, as upon a cross pin or bolt *c*, the hinge being of such character as to admit of the easy and free movement of the socket-piece upon its axis and at right angles to the movements of the pillar. The lever D enters the top of the socket-piece, the interior of which is threaded, and thus holds the lower end of the lever firmly, but so that it may be easily detached when required. The joint between the base-piece and lever is such that the upper end of the lever may be turned in any direction, as partially indicated by the dotted lines in the several figures, and the articulated parts being well fitted to each other there is no lost motion or undue looseness, so that the connection between the lever and treadle is perfect, no matter from what point it may be desired to work the machine. The lever extends up to within convenient reach of the operator and its upper end is free, so that it may be turned to any point desired. When not in use, it may be leaned against the table-top or

turned down upon the floor, or by simply unscrewing it from its socket it may be detached, leaving the other parts in place, where they in no way interfere with the workings of the machine by use of the treadle, if so desired. By simply moving the lever up and down (when it is in place) the treadle takes up a corresponding movement, and through it the machine is operated by hand. It may be employed simply to rest the operator or as the sole means of operating the machine.

The utility of a hand operating attachment for sewing-machines is sufficiently obvious, especially to those who cannot or are not permitted to use the treadle.

In those forms of hand-operating devices which employ a crank the position of the hand is constrained and the operation becomes tedious, as well as at times difficult, on account of the position and character of the work. By leaving the upper end of the lever free to be moved toward any point the hand and arm of the operator are not constrained and the movements required to be made are easy and natural.

The improved attachment can be applied at a trifling expense, adds nothing to the friction of the machine, and in no way interferes

with its ordinary use or accessibility of any of its parts.

The lever may be conveniently employed to operate the machine by another other than the person guiding the work, as it may be placed at the back or other part as well as the front and reached from a point out of the way of the sewer.

The appliance thus described is found in practice to admirably answer the purposes or objects of the invention previously set forth.

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

The herein-described appliance for operating sewing-machines, consisting of a hand-lever, a threaded socket therefor, a revoluble pillar mounted in the base-piece and upon which said socket is hinged, and a securing bolt and washer, all combined and arranged substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

JESSIE LEWIS GARDNER.

Witnesses:

W. J. MORGAN,
WORTH OSGOOD.