

UNITED STATES PATENT OFFICE.

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TREADLE MECHANISM.

No. 916,734.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HOWARD W. LODER, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Treadle Mechanism, of which the following is a full, clear, and exact description.

10 The object of the invention is to provide a new and improved treadle mechanism for use on sewing machines and the like, and arranged to permit convenient and quick adjustment of the treadle, to suit tall or short
15 persons, with a view to enable the same to actuate the machine with the least physical exertion and with the greatest comfort.

20 The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

25 A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a cross section of the improvement; and Fig. 2 is a front elevation of the same.

30 A treadle A of the usual shape is provided at its sides near the middle thereof with trunnions B, B', journaled in the forward end of a swing frame C, fulcrumed at its rear end at D on the frame E of the sewing machine or
35 other machine on which the treadle mechanism is used. The trunnions B B' are pivotally connected by links F with hand levers G fulcrumed at their rear ends at H on the frame E, and the forward ends of said hand
40 levers G are adapted to engage corresponding notches in the racks I attached to the frame E at the front thereof.

45 The rear end of the treadle A is pivotally connected by a link J with a pitman lever K, fulcrumed at L on one of the hand levers G, and the forward end of the said pitman lever K is pivotally connected with a pitman N engaging a wrist pin O on the pulley or fly wheel P of the sewing machine or other machine on which the treadle mechanism is used.
50 Now when the treadle A is actuated by the operator in the usual manner, it turns on the

trunnions B, B' supported by the swing frame C and the links F, and the rocking motion given to the treadle A is transmitted by 55 the link J to the pitman lever K, which in turn actuates the pitman N turning the pulley or fly wheel P. When it is desired to raise the treadle A to suit a person of shorter stature, then the hand levers G are disengaged from their notches in the racks I, then swung upward and each engaged with a notch while up, as indicated, for instance, in dotted lines in Fig. 1, so that the links F are lifted and with it the trunnions B, B' whereby a 65 forward and upward swinging motion is given to the swing frame C, at the same time raising the treadle A the desired distance, as indicated in dotted lines in Fig. 1. Thus from the foregoing it will be seen that by 70 simply adjusting the hand levers G, the treadle A can be readily raised or lowered, so as to bring the same in position for persons of different stature, to enable such persons to actuate the treadle A with the least physical exertion and with the greatest comfort. 75

If desired, the link F, the lever G and the rack I at the left of Fig. 2 may be omitted as it is not absolutely necessary that the said parts be employed at both sides of the machine. 80

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

1. A treadle mechanism, comprising a 85 treadle, a swing frame on which the said treadle is mounted to rock, an adjustable supporting device for raising or lowering the said swing frame and treadle, and a power-transmitting device connecting the said 90 treadle with the part to be rotated, the said power-transmitting device being hung on the said adjustable supporting device.

2. A treadle mechanism, comprising a 95 treadle, a swing frame on which the said treadle is fulcrumed, an adjustable hand lever pivotally connected with the said swing frame, a pitman, and a pitman lever fulcrumed on the said hand lever and connected at one end with the said pitman and at the 100 other end with the said treadle.

3. A treadle mechanism, comprising a treadle, a swing frame on which the said treadle is fulcrumed, an adjustable hand le-

ver, a link connecting the said hand lever
with the said swing frame, a pitman, a pit-
man lever pivotally connected with the said
pitman and fulcrumed on the said hand le-
5 ver, and a link connecting the said pitman
with the said treadle.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

HOWARD W. LODER.

Witnesses:

THEO. G. HOSTER,
EVERARD B. MARSHALL.