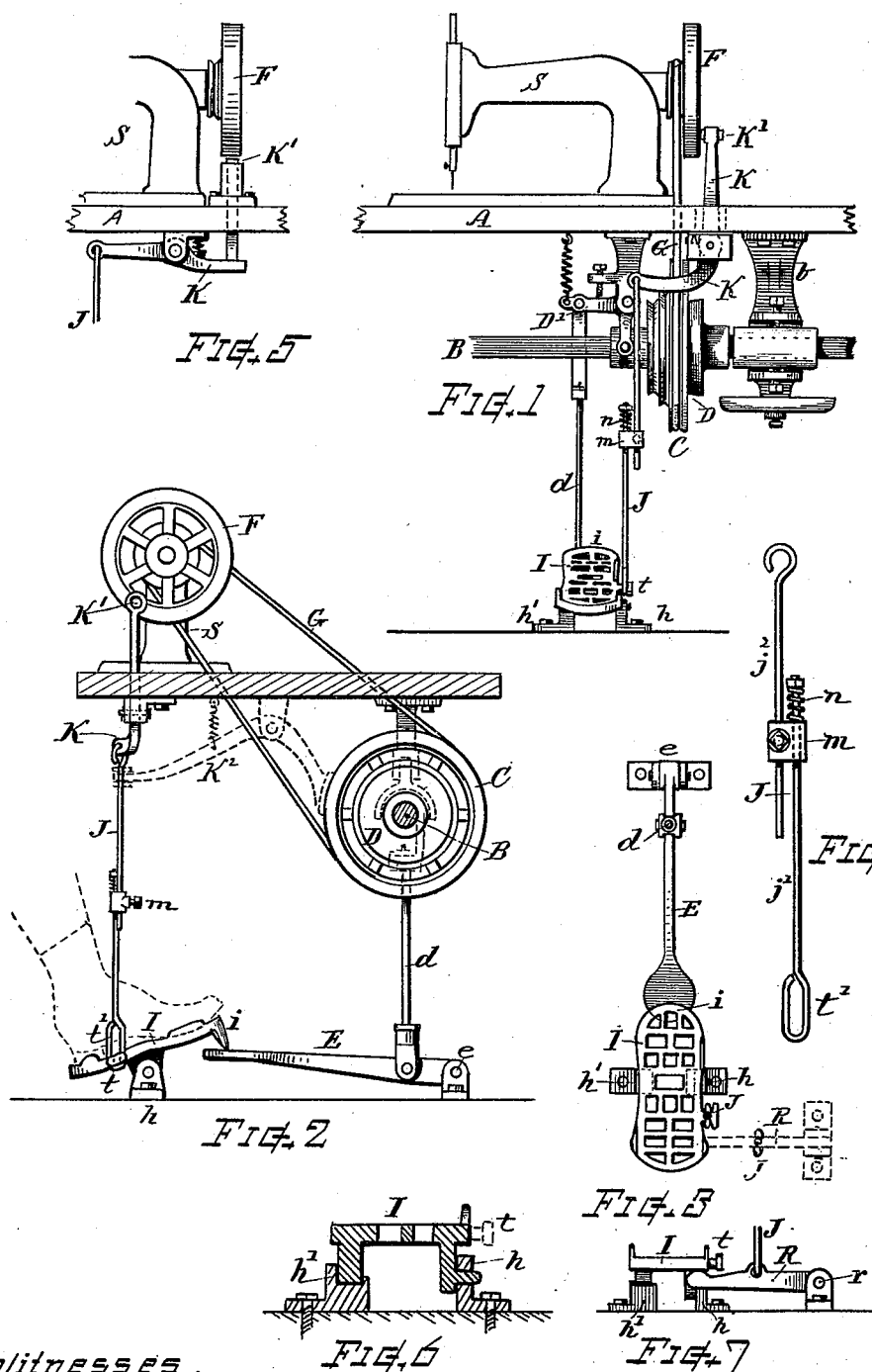


(No Model.)

T. J. SAWYER.
AUXILIARY PEDAL MECHANISM AND BRAKE FOR SEWING MACHINES.
No. 421,056. Patented Feb. 11, 1890.



Witnesses.

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AUXILIARY PEDAL MECHANISM AND BRAKE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 421,056, dated February 11, 1890.

Application filed November 16, 1889. Serial No. 330,533. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. SAWYER, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Auxiliary Pedal Mechanism and Brake for Sewing-Machine-Driving Apparatus, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

The object of my present invention is to provide an auxiliary attachment or apparatus, consisting of a rocker-pedal and brake-operating devices, to be used in connection with sewing-machines and their power-driving mechanism, which auxiliary attachment shall be conveniently applicable supplementary to the sewing-machines and driving mechanism such as are already in use, thereby affording more convenient and desirable facilities for throwing in and off the driving-clutch and at the same time operating a brake in conjunction with the band-wheel for instantly stopping the action of the sewing-machine or releasing the same, as more fully hereinafter explained. This object I attain by the mechanism illustrated and described, the particular subject-matter claimed being hereinafter definitely specified.

In the drawings, Figure 1 is a front view showing the arrangement of my auxiliary pedal and brake attachment as combined with a sewing-machine and its power-driving mechanism. Fig. 2 is a side view of the same. Fig. 3 is a plan view of my supplementary rocker-pedal and the clutch-actuating treadle. Fig. 4 shows the construction of the adjustable and yielding connection-links. Fig. 5 shows the brake as arranged for bearing on the peripheral face of the sewing-machine wheel. Fig. 6 is a transverse section showing the hinging of the rocker-pedal, and Fig. 7 is a back view showing the rocker-pedal and a side extension-lever for use in cases where the connecting-links are required to be placed at some distance to one side (right or left) of the rocker-pedal.

Referring to parts, A denotes the bench or

table upon which the sewing-machine S is supported; B, the power-driving shaft supported to rotate in suitable hangers *b*; C, the operating-pulley; D, the friction-clutch mechanism for connecting and disconnecting said pulley and the rotating shaft; D', the clutch-shifting devices worked by the rod *d* and the treadle E, which latter is fulcrumed at *e*, with its forward end movable up and down.

F indicates the wheel of the sewing-machine, and G the belt or band for operating the same.

All of the above-named parts are such as are well known, and are herein shown constructed and arranged in the usual well-known manner.

I indicates my auxiliary rocker-pedal disposed in front of the treadle E, and supported on fulcrum-brackets *h h'*, with its toe end *i* over and above the end of the treadle-lever E, so as to depress said treadle when the pedal is rocked forward.

K indicates the brake-lever carrying a bearing-pad or presser K', that works in conjunction with or against the wheel F of the sewing-machine for instantly arresting its motion when the brake is brought into action. A connecting-link J is arranged from the brake-lever K to the rocker-pedal I for applying the brake when the heel end of said pedal is depressed. Said link J is best made in two parts *j' j''*, and provided with an adjusting-coupling *m* for giving greater or less length, to meet any particular situation, and is preferably provided with a spring *n*, arranged between a head on the part *j'* and the coupling *m*, so as to afford a yielding action as the pedal is depressed, and after the brake-pad K' is in contact with the wheel F. A headed projection *t* is formed on the side of the pedal I, and the link-rod J is furnished with a long loop *t'*, that will pass over said projection when the rod is in horizontal position and then, when upright, cannot escape. One of the fulcrum-brackets *h* is made with an opening to receive the pivot-stud fixed in the ear of the pedal, and the other bracket *h'* has a rounded seat in which a bearing, lug, or ear formed on the rocker-pedal rests, thus affording a convenient means of support, which permits of the rocker-pedal being lifted from

the brackets to facilitate sweeping the floor beneath it.

When desired, a brake can be arranged to operate on the band-wheel C, as indicated by dotted lines K² on Fig. 2.

In some instances the treadle E and the brake-connection J are necessarily so far out of line with each other that the link J cannot conveniently run direct to the side of the rocker-pedal I. In such cases an offsetting lever R may be employed, one end being fulcrumed to a bracket, as at r, and its other end engaging beneath the heel end of the rocker-pedal, the link J being attached to the offsetting lever at a suitable distance from the rocker-pedal, as indicated in Fig. 3 by dotted lines and in Fig. 7.

The rocker-pedal and brake devices herein shown and described can be readily and conveniently applied supplementary to the class of power-driving apparatus indicated, and which are already in use, by simply adding the auxiliary parts and without requiring any material change in the structure of existing apparatus, thus affording a more efficient and desirable means of control for the machines at a comparatively small expense, and without the necessity of changing or replacing the existing clutching and pulley mechanism.

In some instances, if desired, the toe end of the rocker-pedal can be attached to the treadle E by a hinge or flexible connecting-joint, so that said treadle will be positively lifted when the toe is swung upward. In other cases the toe of the rocker-pedal can be arranged to simply rest upon the end of the treadle without having fixed attachment thereto, as shown. The yielding spring n may in some instances be disposed at other position in the connection—as, for instance, between

the link-rod J and the brake-lever K, or between the brake-lever K and the presser-pad K'; or, if desired in any case, the mechanism can be used without the yielding spring n, a non-adjustable link J being used.

I am aware that rocking treadles have heretofore been employed in sewing-machine-driving apparatus, and also brakes; and it will be understood that I do not broadly claim such devices except in the combination and auxiliary arrangement, as set forth and defined.

I claim as my invention, to be herein secured by Letters Patent—

1. In mechanism for the purpose specified, the auxiliary rocking pedal I, brake-connecting link J, and brake K, adapted for supplementary use, in combination with the treadle, the shaft, the clutch, and the power-driving mechanism controlled by said treadle and adapted for a connection with a sewing-machine, all substantially as and for the purposes set forth.

2. The combination, with the treadle E, whereby the power-driving mechanism is controlled, the power-driving shaft and pulley, and a wheel operated by a belt therefrom, of the auxiliary rocker-pedal, its detachable fulcrum-supports, the brake-connecting link having the adjusting-coupling and yielding spring, and the brake-lever carrying a presser or pad that engages and arrests the movement of the wheel, all substantially as and for the purposes set forth.

Witness my hand this 13th day of November, A. D. 1889.

THOS. J. SAWYER.

Witnesses:

CHAS. H. BURLEIGH,
ELLA P. BLENUS.