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UNITED STATES PATENT OFFICE.

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MECHANISM FOR CONTROLLING STEAM-DRIVEN SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 326,457, dated September 15, 1885.

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To all whom it may concern:

Be it known that I, JAMES H. ROHME, of Newburg, in the county of Orange and State New York, have invented certain new and
5 useful Improvements in Controlling Mechanisms for Steam-Driven Sewing-Machines, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying
10 drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of my improvement shown as applied to a sewing-
15 machine. Fig. 2 is a sectional end elevation of the same, taken through the broken line *x x x*, Fig. 1. Fig. 3 is a plan view of a part of the same, showing the mechanism for throwing the driving-pulley into and out of
20 gear. Fig. 4 is a side elevation of the driving-pulley, the driving-shaft being shown in section.

The object of this invention is to provide controlling mechanisms for steam-driven sewing-machines, by the use of which the said
25 machines can be instantly started or stopped, and their speed can be readily controlled.

The invention consists in the construction and combination of the various parts of the
30 mechanism, as will be hereinafter fully described, and then claimed.

A represents a sewing-machine; B, the sewing-machine table, and C the frame. D is the driving-shaft, to which motion is given
35 from a steam-engine in the ordinary manner.

To a standard, E, secured to the floor beneath the rear part of the table B, is secured a bearing, F, which is provided with a sleeve, G, upon which revolves the hub of the driving-pulley H. Upon the side of the pulley
40 H is formed an annular rib or flange, I, which enters an annular groove, J, in the side of a friction-wheel, K, the hub of which is secured to the driving-shaft D by set-screws L, or
45 other suitable means. The face of the pulley H is grooved to receive the driving-belt M, which also passes around a pulley, N, attached to the shaft of the sewing-machine A. The hub of the driving-pulley H projects

upon only one side of the said pulley, and
50 upon it, near its outer end, is formed an annular rib or flange, O, upon which, at the opposite sides of the said hub, rest the slotted heads of two pivots or pins, P. The pins P are pivoted to the upper ends of two arms, Q,
55 which project upon the opposite sides of the hub of the drive-pulley H. The lower ends of the arms Q are formed upon the shaft R, which rocks in bearings in the upper ends of the standards S, attached to the floor of the
60 room. Upon the shaft D, and projecting at right angles with the arms Q, is formed, or to it is rigidly attached, an arm, T, to the outer end of which is hinged the upper end of a connecting-rod, U. The lower end of the
65 connecting-rod U is hinged to the end of the treadle V, which is fulcrumed at or near its center to a rod, W, attached to the frame C, so that the operator by operating the treadle V can throw the pulley H into or out of gear
70 with the friction-wheel K, or so adjust the said pulley that it will be driven at any desired speed.

Upon the shaft R is formed, or to it is rigidly attached, an arm, X, which projects down-
75 ward at such an inclination that when the said shaft R is rocked to throw the pulley H out of gear with the friction-wheel K the end of the arm X will be brought into contact with the side of the said pulley H, and will act as
80 a brake to instantly stop its movement. When the shaft R is rocked to throw the pulley H into gear with the friction-wheel K, the brake-arm X will be withdrawn from the said pulley H. With this construction, by
85 operating the treadle V the operator can stop the pulley H, and with it the sewing-machine, instantly, and can instantly start the said pulley and sewing-machine at any desired speed.
90

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

1. The combination, with a sewing-machine, A, having pulley N and the driving-shaft D,
95 of the friction-wheel K, having annular groove J, the pulley H, connected with the pulley N by a belt, M, and having an annular flange, I,

upon its side to engage with the grooved friction-wheel K, and an annular flange, O, upon its hub to engage with slotted pins P, and the rock-shaft R, provided with arms Q, carrying
5 the slotted pins P, and provided with an arm, T, connected with the treadle V by a rod, U, substantially as herein shown and described, whereby the said pulley and sewing-machine
10 can be started and stopped, and the speed can be controlled by operating the said treadle, as set forth.

2. The combination, with the drive-pulley

H and the rock-shaft R, connected with the said pulley by the arms and pins Q P, and with the treadle V by the arm and rod T U, 15 of the brake-arm X, substantially as herein shown and described, whereby the said pulley will be instantly stopped when thrown out of gear with its friction-wheel, as set forth.

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Witnesses:

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