



# UNITED STATES PATENT OFFICE.

NICHOLAS NIEDERPRUEM, OF BUFFALO, NEW YORK.

IMPROVEMENT IN MEANS FOR ADJUSTING THE DRIVING-WHEEL OF SEWING-MACHINES.

Specification forming part of Letters Patent No. 47,560, dated May 2, 1865.

*To all whom it may concern:*

Be it known that I, NICHOLAS NIEDERPRUEM, of Buffalo, in the county of Erie and State of New York, have invented a certain new and useful Improvement in Adjusting the Driving Wheel of Sewing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical longitudinal section of the ordinary stand or table of a sewing-machine having my adjustment; Fig. 2, a view in elevation of a portion of one of the standards with the slot and journal-box which adjusts therein.

Like letters of reference indicate corresponding parts in both figures.

My improvement has for its object the adjustment of the driving-wheel of sewing-machines; and the invention consists in the arrangement of a sliding frame with a screw-rod passing upward from the same through the top of the stand or table, and so constructed and arranged in relation to the latter that by merely turning a thumb-piece at the upper end of said rod the driving-wheel may be adjusted at pleasure, thereby producing any degree of tension or relaxation of the band of said wheel without stopping the machine or requiring the operator to remove his hand from the work upon the stand.

As represented in the drawings, A is the stand or table of an ordinary sewing-machine; B, the top of the same; C C, the standards which support the driving-wheel D, and E the sliding frame by which the latter is adjusted.

F is a screw-rod with a thumb-piece *a* at the top, which passes downward through the top of the stand or table at *b* in a nut counter-sunk in the same, or its equivalent, and is attached at its lower end to the cross piece or head *c* of the sliding frame E. To this cross-head *c* stirrups *d d* are secured in any desirable manner; or they may be cast or formed with it in a single piece, the lower ends of which are securely fastened in any desirable way to

the boxes *ee* of the journals *ff* of the driving-wheel. These boxes or bearings *ee* are fitted and slide in slots *gg* of the standards or supports C C.

G is the band of the driving-wheel, connecting with the pulley *i*, which is supported in bearings in any ordinary manner, and by which motion is imparted to the working parts of the machine.

It will be readily perceived that the adjustment is accomplished by simply turning the thumb-piece *a*, when the sliding frame E and with it the boxes *ee* and driving-wheel are correspondingly raised or lowered, as may be desired, to give, the necessary tension or relaxation to the band G.

In the use of a sewing-machine the operator has frequent occasions for tightening and loosening the band while at work, owing to the variation in the thickness of the material or seams in the same garment, and as the hands are generally employed in holding and guiding the work while being sewed it causes much delay and inconvenience to stop the motion and adjust the tension in the ordinary manner by the use of a wrench and both hands beneath the table, especially as several experiments have frequently to be made before attaining the proper adjustment. By my arrangement the band may be tightened, when required, without stopping the machine by simply turning the thumb-piece with one hand, while the other remains at liberty to guide the seam.

In winding the bobbins and when the machine is not in operation it is desirable to lessen the tension of the band, so that it may retain its elasticity and work more easily, requiring to be made taut again when the machine is operated for other purposes. These and other occasions for adjusting the driving-wheel render the use of my improvement a great saving of time and labor, and prevent much inconvenience.

By mounting the driving-wheel between two standards, instead of having it revolve on a stationary axis projecting from a single standard, as is ordinarily done, it is secured from

that vacillation of movement and the consequent noise that results from the latter method.

I do not claim broadly adjusting the driving-wheel of sewing-machines, as I am aware that such is not new; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of the sliding frame E, thumb-screw F, and journal-boxes *e e*, in combination with the table-top of a sewing-ma-

chine, substantially as and for the purpose herein set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

NICHOLAS NIEDERPRUEM.

Witnesses:

JAY HYATT,

J. FRASER.