T. A. TEATE.

SEWING MACHINE ATTACHMENT.

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995,499.

Patented June 20, 1911.

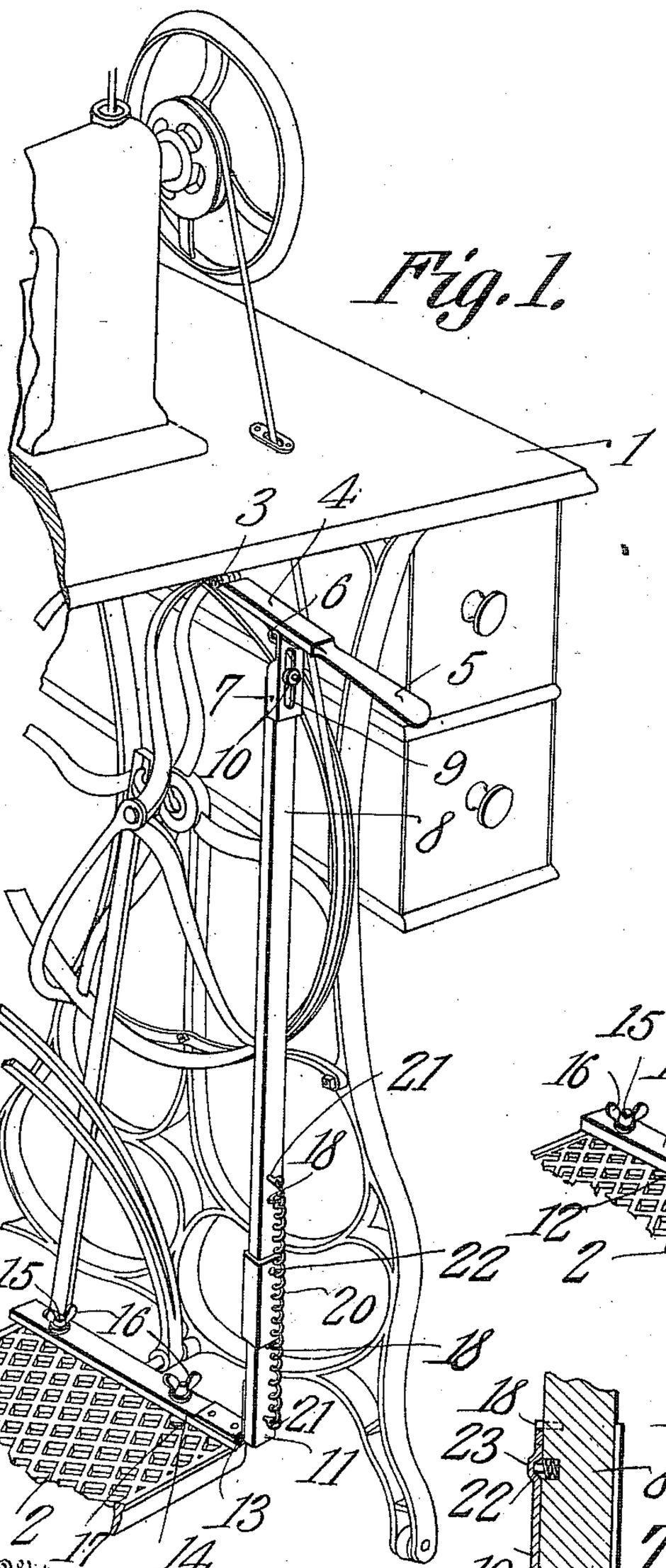

Fig. 1.

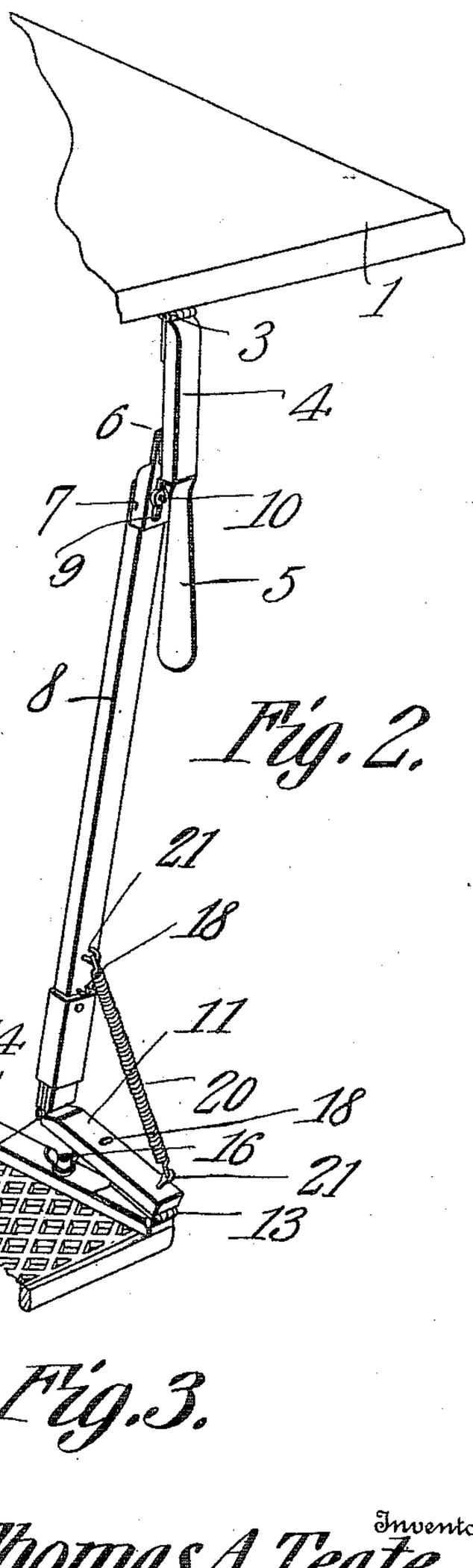

Fig. 2.

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS A. TEATE, OF THOMASVILLE, GEORGIA, ASSIGNOR OF THREE-FOURTHS TO NEEL BROS., OF THOMASVILLE, GEORGIA, A FIRM.

SEWING-MACHINE ATTACHMENT.

995,499. Specification of Letters Patent. Patented June 20, 1911.

Application filed August 23, 1909. Serial No. 514,232.

To all whom it may concern:

Be it known that I, THOMAS A. TEATE, a citizen of the United States, residing at Thomasville, in the county of Thomas and State of Georgia, have invented a new and useful Sewing-Machine Attachment, of which the following is a specification.

This invention has reference to improvements in attachments for sewing machines and its object is to provide a means whereby an ordinary sewing machine may be operated by hand power and also be operated by foot power when so desired.

In accordance with the present invention there is provided a hand lever which may be conveniently attached to the table of the sewing machine in position for ready operation by the user of the sewing machine, and a pitman or connecting rod is provided leading from the hand lever to the treadle of the machine, there being provision for connecting the pitman to the machine treadle, and provision is further made for the collapsing of the pitman in such manner that the lever and the pitman may be readily accommodated below the table of the machine out of the way without the necessity of disconnecting the pitman from the treadle, and furthermore, provision is made for assisting the operation of the machine by foot power.

The invention will be best understood from a consideration of the following detail description taken in connection with the accompanying drawings forming a part of this specification, in which drawings—

Figure 1 is a perspective view of the device in operative position with so much of a sewing machine as is necessary for the understanding of the invention. Fig. 2 is a similar view showing the attachment in the collapsed or inoperative position. Fig. 3 is a detail section through a portion of the pitman.

Referring to the drawings, there is shown a table 1 and treadle 2 of a sewing machine, and this showing may be taken as typical of any sewing machine to which the attachment is adaptable. Secured to the under side of the table 1 by means of a hinge 3 is one end of a lever 4, the other end of which is formed into a handhold 5 of such shape as to be convenient for grasping by the hand of the operator. At an intermediate point on the under side of the lever 4 there is secured a hinge 6 having at its free end a channel strip 7 adapted to partially embrace one end of a pitman 8. The channel strip 7 has formed in it a longitudinal slot 9 through which there may be passed a suitable screw carried by the pitman and adapted to receive a clamp nut 10 which is preferably of the ordinary milled thumb-nut type. The pitman 8 is formed of a longer section directly connected to the handle 4 through the hinge 6 and channel strip 7, and a shorter section 11 connected to the longer section by a hinge joint 12. The end of the section 11 remote from that connected to the longer member of the pitman is connected by another hinge 13 to a rod or bar 14 adapted to be connected to the treadle 2 by means of suitable bolts or screws 15 and thumb nuts 16, the bolts or screws carrying at the ends remote from the thumb nuts clamping means such as washers 17. The section 11 is shorter than the bar 14 so that when folded down toward the bar it extends but a portion of the distance to the other end of said bar 14. Surrounding the pitman 8 and capable of sliding longitudinally thereon between stops 18 is a sleeve 19 which, in the particular showing of the drawings, is illustrated as square in cross section since the pitman is also illustrated as square in cross section. The sleeve 19 is of such length that when against the lower stop it will cover the hinge joint 12 and so hold the two members of the pitman in alinement. When, however, the sleeve 19 is moved up against the upper stop the lower edge of the sleeve is above the hinge 12 and consequently the lower section 11 of the pitman is free to move with relation to the longer section of the pitman about the hinge 12 as a pivot. The longer member of the pitman above the upper stop 18 and the shorter member of the pitman below the lower stop 18 are connected together by a spring 20 joined at the ends to eyes 21 and to the respective portions of the pitman. The spring 20 is so proportioned as to be under longitudinal tension or stress when the two members of the pitman are in alinement one with the other so that when the shorter section 11 is released from engagement with the sleeve 19 the spring 20 will tend to move this section 11 about its hinge

12 in a direction to bring its end remote from that connected to the longer section of the pitman toward said longer section.

Let it be assumed that the attachment is secured to a sewing machine with the bar 14 made fast to the treadle 2 and the lever 4 made fast to the table 1, and further let it be assumed that the two members of the pitman 8 are in alinement and so locked by the sleeve 19 covering the hinge or joint 12. Now by grasping the handhold 5 the operator may cause the treadle to turn on its pivot and so actuate the operating parts of the machine the same as though the treadle were operated by foot power. Should the operator now desire to actuate the sewing machine by foot power instead of hand power, the sleeve 19 is moved upward until against the upper stop 18 thus uncovering the hinge 12 and the spring 20 will flex the pitman, permitting the hand lever 4 to drop until the handhold end thereof lies against the pitman and the whole attachment is moved beneath the table 1 out of the way. Under these conditions the long section 8 of the pitman is well to the front of the pitman leading from the treadle of the sewing machine to the fly wheel thereof and consequently the attachment may be secured close to the right hand side of the machine without danger of interfering with the operation of the latter when the attachment is flexed. Now the operator may actuate the machine by the treadle in the usual manner and this movement is assisted by the action of the spring 20 which is stretched every time the heel portion of the foot of the operator is moved downward and retracts and so assists the movement of the treadle under the impulse of the toe end of the foot of the operator.

In order to hold the sleeve 19 in the upper position without danger of its falling toward the hinge 12, a spring stop 22 is seated in the longer arm of the pitman adjacent to the upper stop 18 and a depression 23 on the inner face of the sleeve 19 serves as a seat for the outer end of the spring stop when the sleeve is in the uppermost position and so retains the sleeve in said uppermost position, but this stop will yield to a moderate force tending to move the sleeve toward the lowered position so that an operator may, without the exertion of undue force, move the sleeve along the pitman to the point desired.

The sleeve 19 need not be a complete sleeve since it may be made of a piece of sheet metal bent to proper shape with the adjacent edges slightly separated, for it is only necessary that the sleeve 19 grasp the pitman and be capable of sliding laterally thereon.

The attachment may be applied to different makes of sewing machines, a certain amount of difference between the table 1 and the treadle 2 being provided for by the slotted channel piece 7.

The attachment is readily applied to a sewing machine and as readily removed therefrom at the will of the operator and constitutes a ready means for the application of driving power to the machine by hand or foot as the operator wills.

What is claimed is:

The combination with a sewing machine, of a hand lever hingedly connected to the table of the machine, a bar detachably secured upon the treadle of the machine, a pitman section hingedly connected to the front end of the bar, another longer pitman section hingedly connected with the first mentioned section, a channeled strip embracing and slidably mounted on the upper end portion of said long section of the pitman, means for adjustably securing said strip to the long section, said strip being hingedly connected, at its upper end, to the lever, a spring connecting the front end of the short pitman section to an intermediate portion of the long pitman section, a sleeve slidably mounted on the pitman sections, stops for limiting the movement thereof, said sleeve being movable across the hinge connection between the sections to hold said sections in alinement, and spring pressed means in the long pitman section and normally concealed by the sleeve, for engaging the sleeve to hold it out of engagement with the short pitman section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS A. TEATE.

Witnesses:
W. D. HARGRAVE,
W. H. ROCKWELL.