

(No Model.)

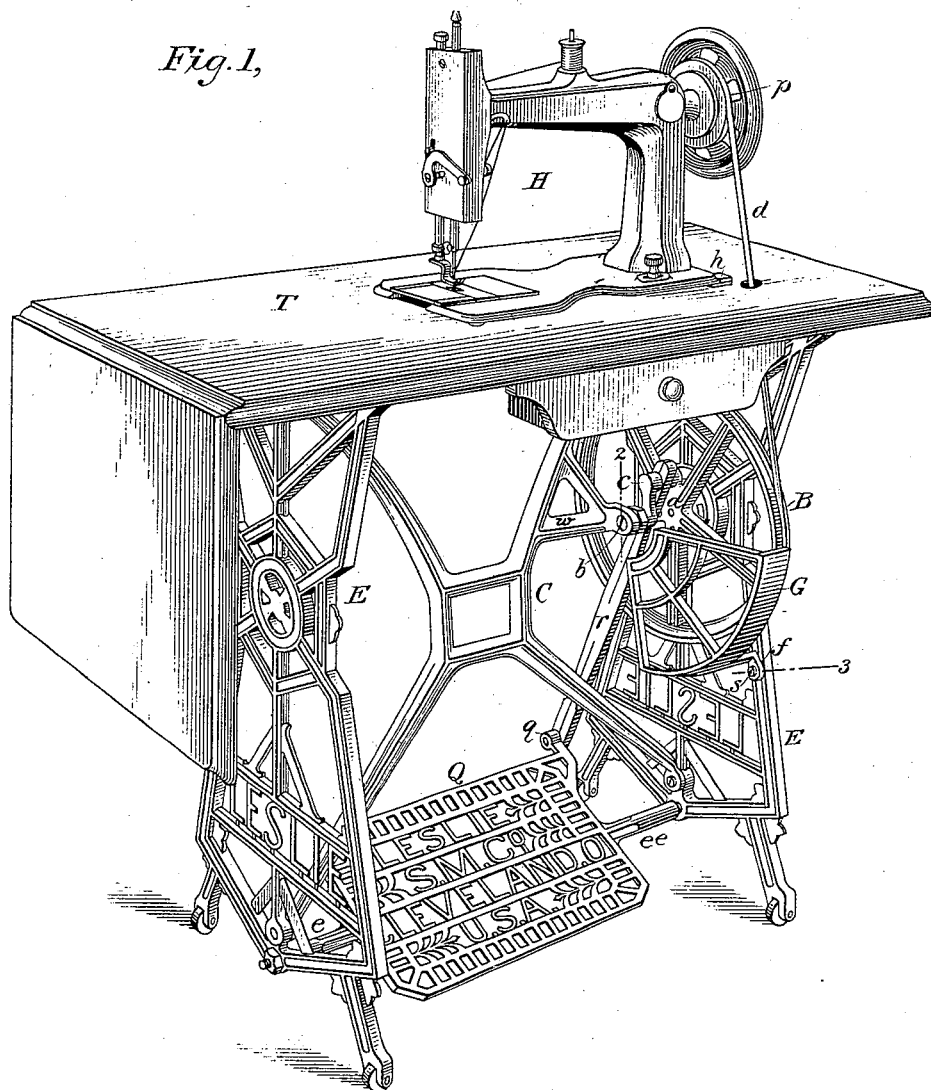
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A. M. LESLIE.
SEWING MACHINE STAND.

No. 262,300.

Patented Aug. 8, 1882.

Fig. 1,



WITNESSES

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Arthur M. Leslie,

By his Attorney

Geo. L. Swin.

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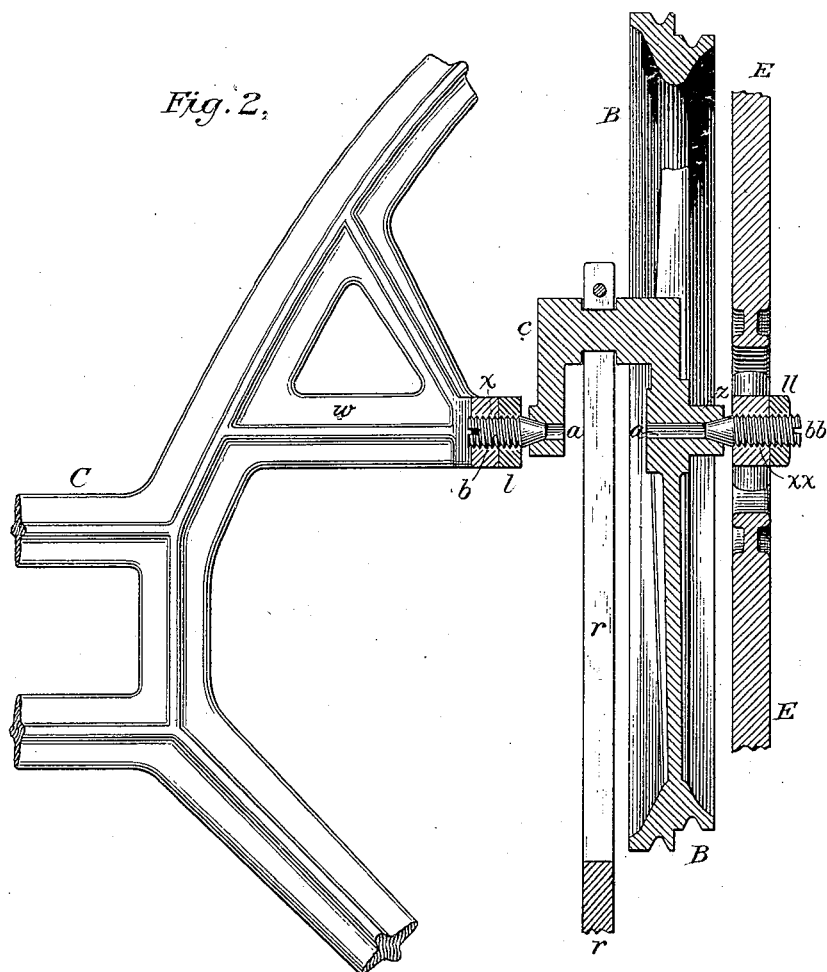
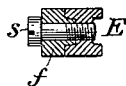


Fig. 3,



WITNESSES

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UNITED STATES PATENT OFFICE.

ARTHUR M. LESLIE, OF CLEVELAND, OHIO.

SEWING-MACHINE STAND.

SPECIFICATION forming part of Letters Patent No. 262,300, dated August 8, 1882.

Application filed January 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR M. LESLIE, a citizen of the United States, residing at Cleveland, in the State of Ohio, have invented a new and useful Improvement in Sewing-Machine Stands, of which the following is a specification.

My present invention relates to improvements in hanging and guarding the band-wheels of sewing-machines.

The first part of this invention consists in a novel combination of parts, whereby the band-wheel is very solidly and securely supported so as to run truly and noiselessly, with less parts than are usually employed, and so as to facilitate lubricating and cleaning the bearings and taking up wear.

The said invention consists, secondly, in an improved wheel-guard securely supported by means of a single screw independently of the central brace of the stand, so as to facilitate hanging the band-wheel, as aforesaid.

My improved sewing-machine stand is primarily designed for use in connection with my rotary shuttle-machine or "head," claimed in part in my specification forming part of Letters Patent No. 241,808, dated May 24, 1881, and more fully in my specification forming part of Letters Patent No. 241,553, dated May 17, 1881, and that of my application for patent filed September 29, 1881. Its aforesaid features may be embodied, however, in the stands of other sewing-machines.

In the accompanying drawings, Figure 1 represents a perspective view of a Leslie sewing-machine illustrating this invention. Fig. 2 represents a sectional view, on a larger scale, in the plane of section indicated by the broken line 2, Fig. 1; and Fig. 3 represents a cross-section through the supporting-lug of the wheel-guard on the line 3, Fig. 1, like letters of reference indicating corresponding parts in the several figures.

H, Fig. 1, represents the rotary shuttle-machine or head aforesaid, with its pulley *p*, (of two diameters;) T, the customary horizontal table-top, to which the head H is attached at one of its ends by hinges *h*; B, a band-wheel (of two diameters) connected with said pulley by a driving-band, *d*; G, the band-wheel guard; Q, a treadle connected to said band-wheel by a pitman or connecting-rod *r*; and E and O

respectively the end frames and central brace, which, together with the other parts below the table-top, constitute the "stand" of the machine.

The means for hanging the band-wheel B are shown in detail by Fig. 2. The band-wheel itself has cast thereon a pitman-crank, *c*, comprising simply a short and straight "wrist," grooved to receive the split upper end of a wooden pitman, *r*, and a straight extension projecting at right angles from the extremity of said wrist inward to and somewhat beyond the axis of the wheel. A short axial hub, *z*, projects from the back of the wheel, and a cored-out axial hole, *a a*, extends through this hub and the extremity of said crank-extension, and is reamed out at its respective ends within said hub and crank-extension to form conical bearing-sockets, as shown.

The central brace, O, is of the customary X shape in general form, and rigidly unites the two end frames, being connected therewith by a screw at each extremity. It is, moreover, cast with a suitably-inclined skeleton projection, *w*, on the appropriate limb, provided with stiffening-ribs and terminating in a flat end parallel to the end frame, E, at the wheel end of the stand and adjacent thereto, provided with an internal screw, *x*, concentric with the axis of the band-wheel. Said end frame is provided with a like internal screw, *xx*, in line with *x*, by simply drilling and tapping a central part thereof formed and arranged with reference to this use; and radial struts extend from this center to the edge bars of the frame, and are united by concentric rings, so as to resist and distribute strain, while the members of the central brace, O, perform together a like function. Adjustable bearings *b bb* in the form of headless screws occupy said internal screws, *x xx*, and are constructed with conical bearing-points, which occupy said bearing-sockets of the band-wheel and its pitman-crank, adapting the latter to run smoothly and noiselessly, while their form itself facilitates taking up wear and lubricating and cleaning the bearings. The latter are further materially facilitated by the said axial hole *a*; but this is not considered an essential feature.

The exposure of the top of the pitman-crank *c* by supporting the inner adjustable bearing, *b*, by means of a projection, *w*, from the cen-

tral base, as aforesaid, materially facilitates access to the parts which require oiling and frequent cleaning, while the customary inclination of the central brace rearward to give room for the knees of the operator is not interfered with, and convenient access to the bearing-screw *b* for turning it to adjust the bearings is thus afforded. Lock-nuts *l ll* secure the respective bearing-screws against turning by jars.

The wheel-guard *G*, which is a distinct casting, has a single supporting projection or foot, *f*, integral therewith, having, as shown in Fig. 3, a rib on its back and a screw, *s*, passing therethrough, to coact respectively with the groove or longitudinal depression in the inner side of the front edge bar of said end frame and with a tapped hole in the web of said edge bar, which, in common with other principal members of the end frames, is of **H** shape in cross-section. Said wheel-guard is thus supported independently of the central brace, which facilitates the use of the latter, as aforesaid, to support one of the bearings of the band-wheel. The wheel-guard may, moreover, be readily detached to give more unobstructed access to the parts behind without disturbing or loosening anything else.

The treadle *Q* has cast thereon a corner projection, *q*, Fig. 1, provided with a wrist-pin, to which the lower end of the pitman *r* is attached, and is constructed with rock-shaft ends *e ee*, which are countersunk and pivoted by a pair of bearing-screws similar to *b bb*,

supported centrally by the lower members of the respective end frames.

Other details of the stand require no particular description.

I claim as my invention and desire to protect under this specification—

1. In a sewing-machine stand having a pair of end frames united by a central brace, the combination, substantially as herein specified, of a central brace constructed with an inclined rigid projection extending to and across the line of the band-wheel axis, and provided in said line with an internally-screw-threaded socket, an end frame having a like socket in the same line, a pair of bearing-screws adjustable in said sockets and having conical bearing-points, and a band-wheel and pitman-crank (in one part) drilled to receive said bearing-points, as shown and described, for the purposes set forth.

2. In a sewing-machine stand having a pair of end frames rigidly united by a central brace which supports an inner bearing for the band-wheel, a distinct detachable band-wheel guard having a ribbed and drilled supporting-lug fitted with an attaching-screw, in combination with an end frame having a groove to receive the rib of said lug and a tapped hole to receive said screw, substantially as herein specified.

A. M. LESLIE.

Witnesses:

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S. H. TOLLES.