March 18, 1969 R. L. BLACK, JR., ET AL 3,432,877

TEXTILE MACHINE TENDING AND CLEANING APPARATUS

Filed Jan. 18, 1966 Sheet 1 of 8

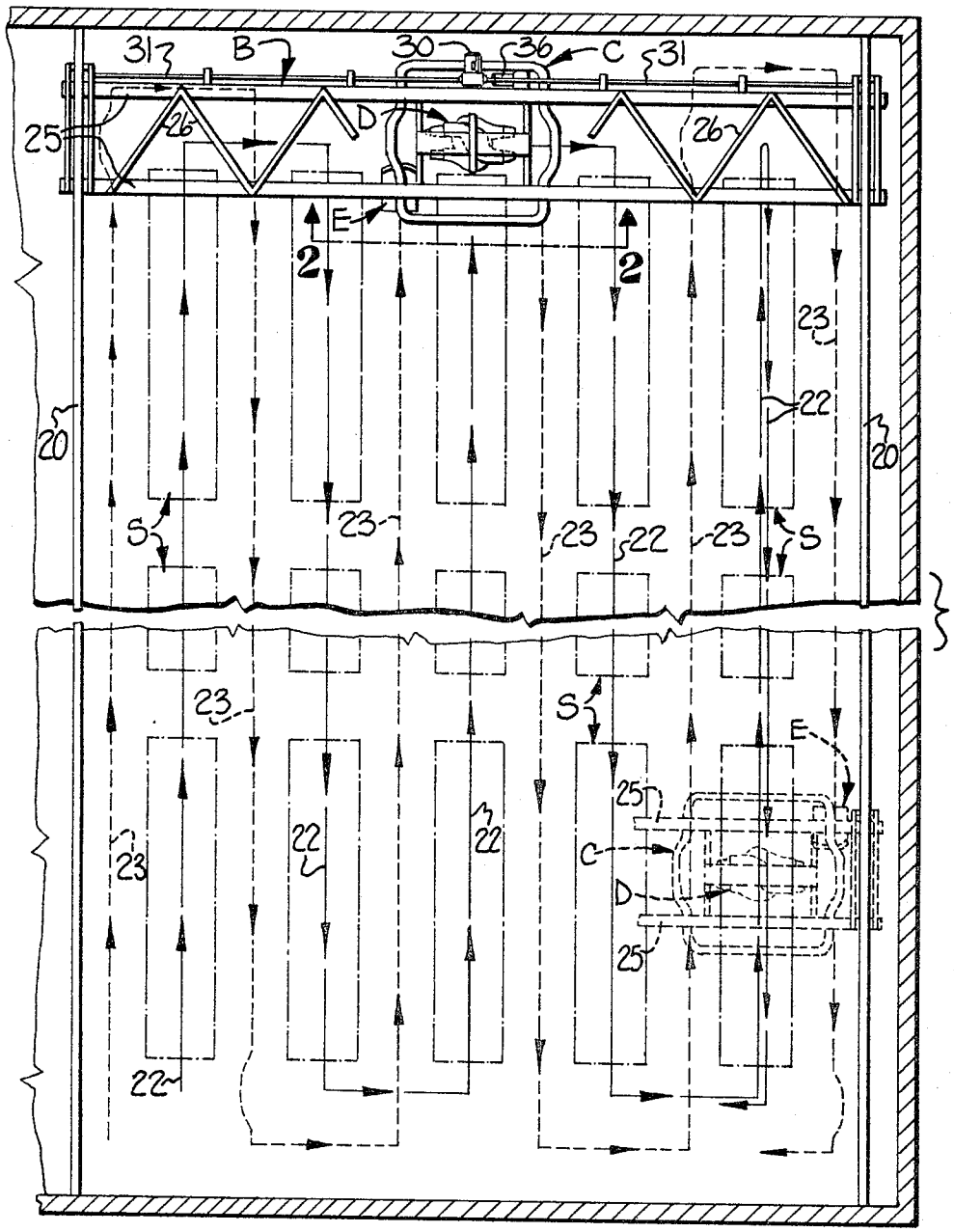


Fig-1

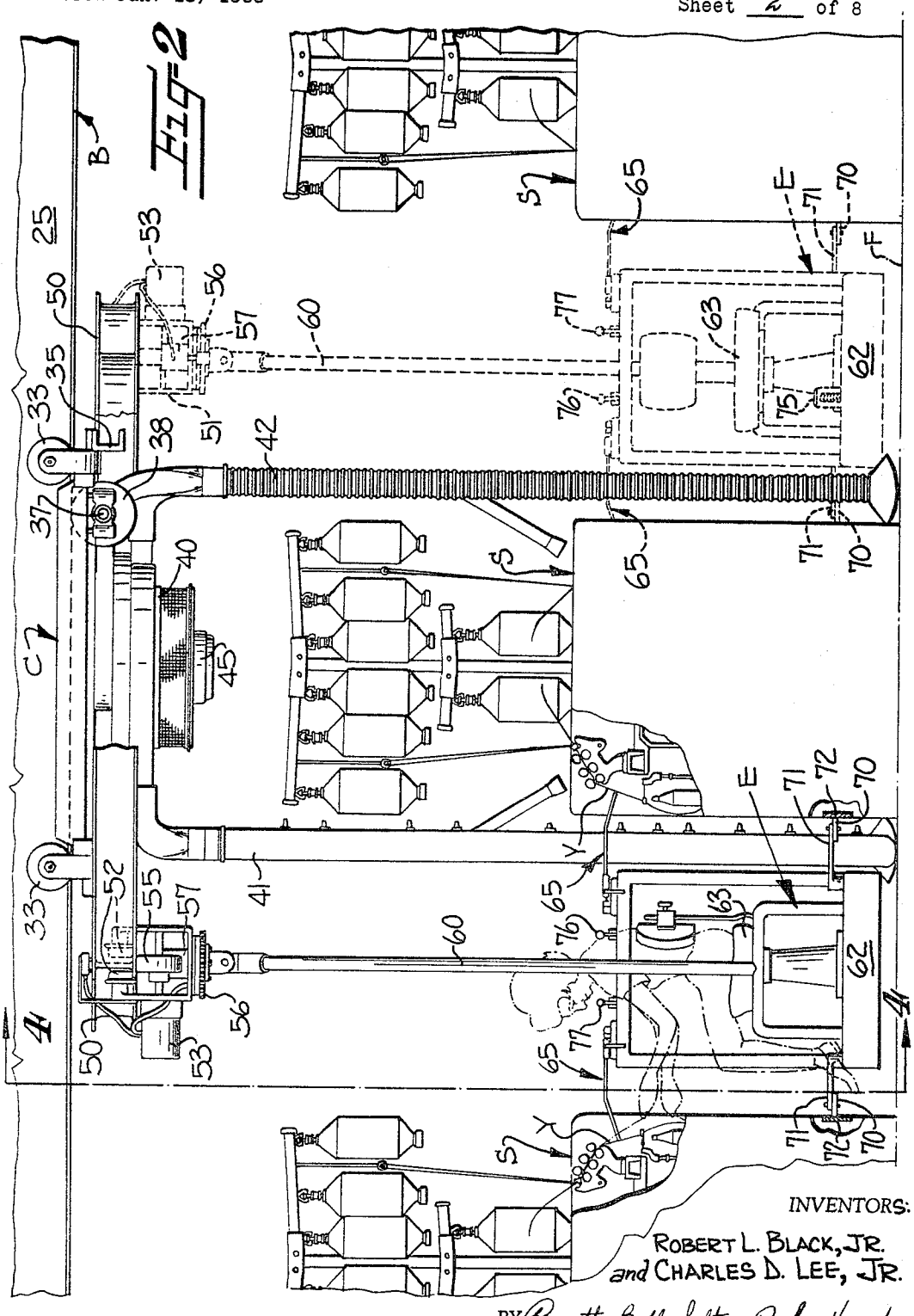
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Fig. 2



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TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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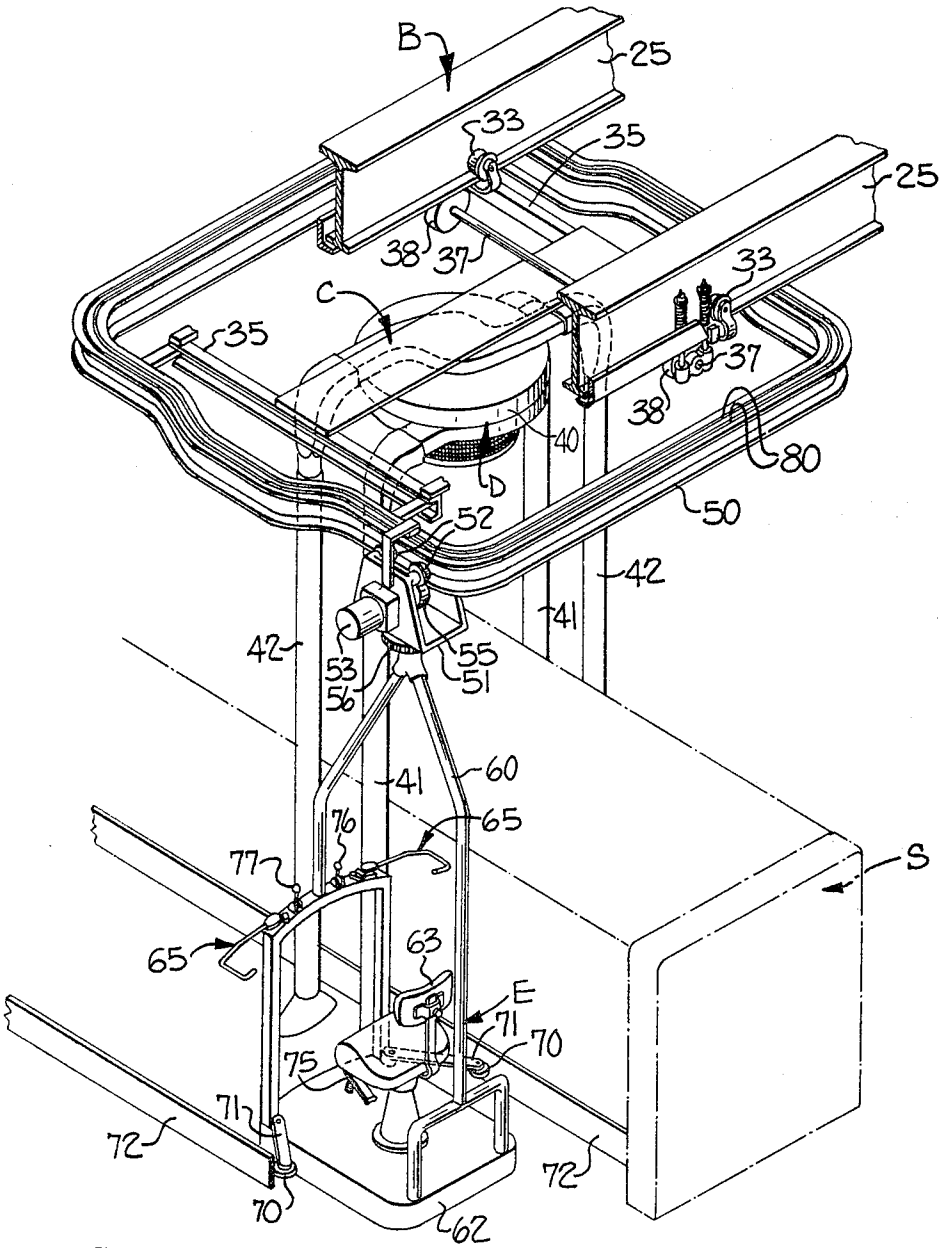


Fig-3

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TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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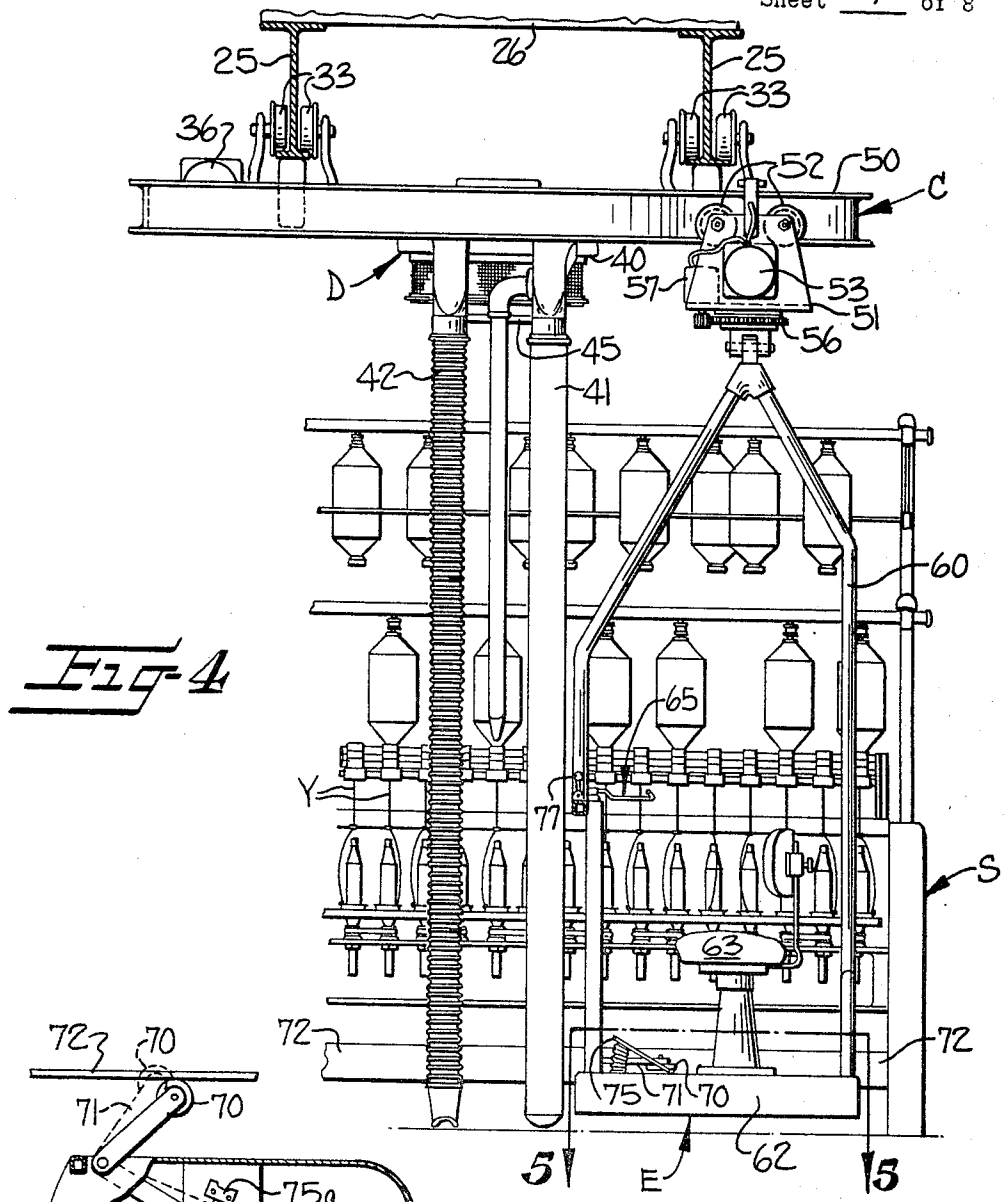


Fig-4

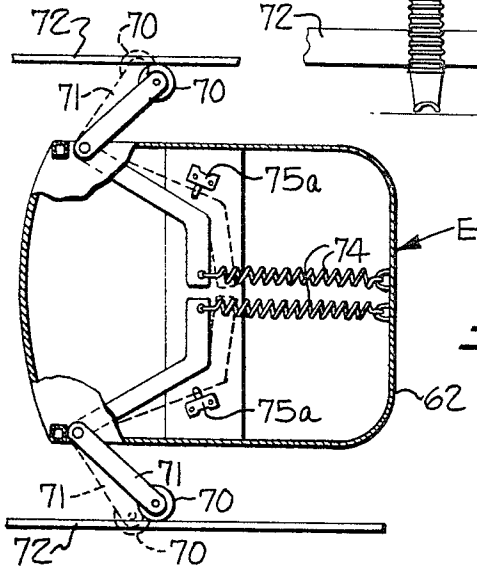


Fig-5

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TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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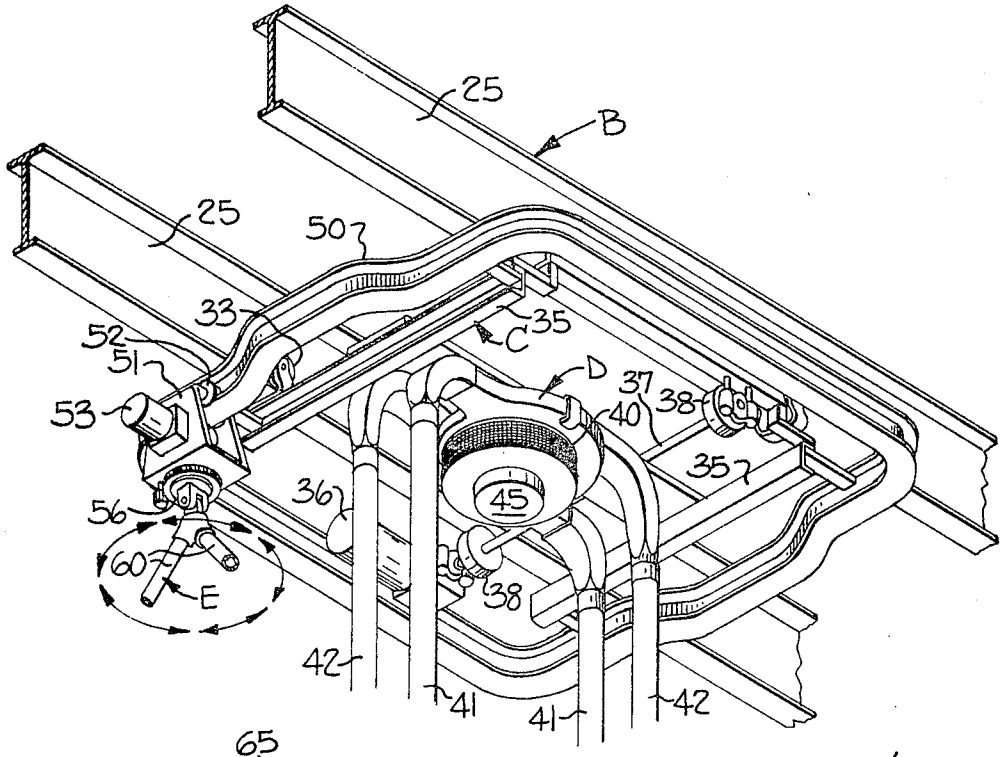


Fig-7

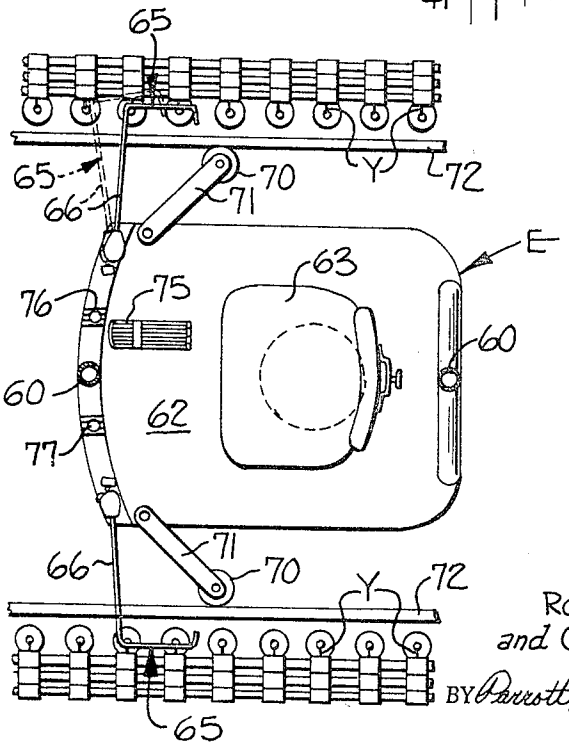


Fig-6

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TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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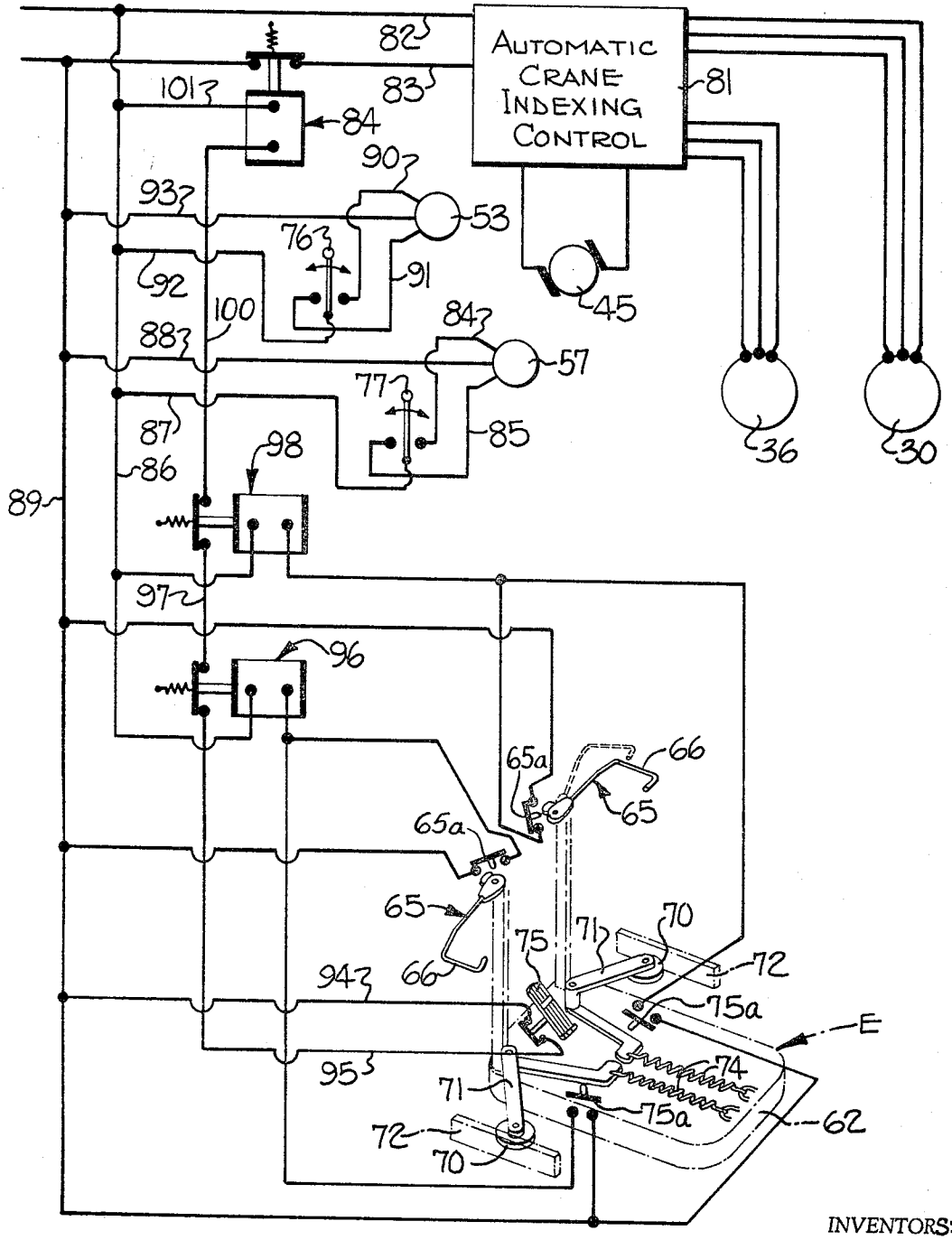


Fig-8

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TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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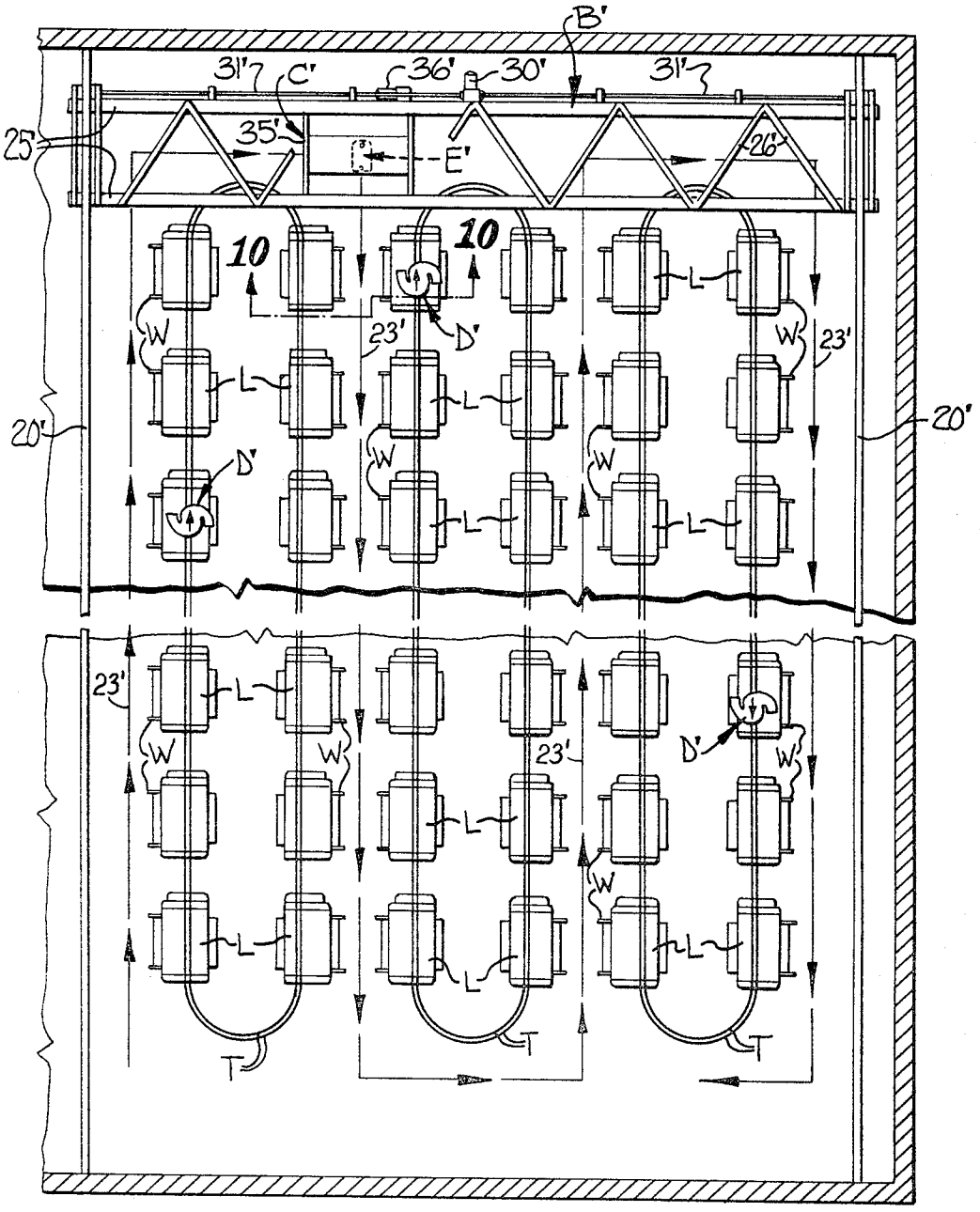


Fig. 9

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TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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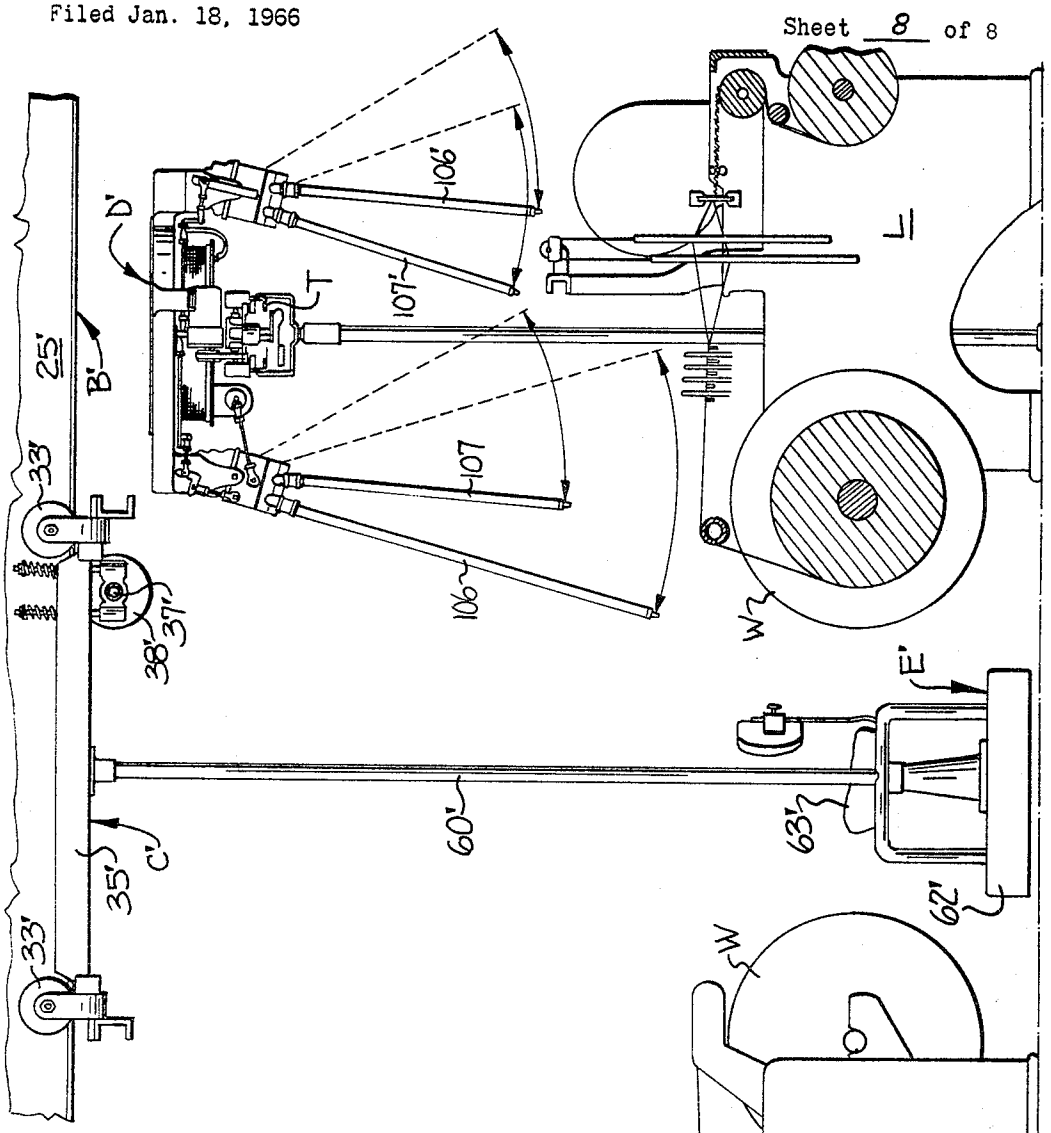


Fig 10

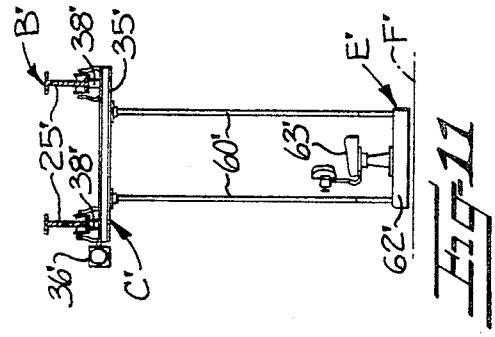


Fig 11

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3,432,877

TEXTILE MACHINE TENDING AND CLEANING APPARATUS

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Filed Jan. 18, 1966, Ser. No. 521,276
U.S. Cl. 15—312 8 Claims
Int. Cl. A47l 5/38

ABSTRACT OF THE DISCLOSURE

An apparatus for transporting a textile machine operator or tender alongside textile machines arranged in at least two rows in a predetermined path of travel and on a regular schedule.

This application is related to our pending application entitled Travelling Tending System for Textile Machines, Ser. No. 514,220, filed Dec. 16, 1965, and now Patent No. 3,360,914 issued Jan. 2, 1968.

Our copending application discloses a travelling operator-carrying car operatively associated with a pneumatic travelling clean system which is carried on a track supported by and extending above the rows of textile machines. The cleaning system and the tending car are each driven by means of electric motors which receive their electrical energy from conductors on the overhead track. The tending car of our copending application is supported on and travels along the floor, being guided by a floor-mounted trackway extending between and around the rows of textile machines. The tending car operates at a slower speed than the travelling cleaning system and when the travelling cleaning system reaches the tending car, means is provided for automatically reversing the drive motor of the cleaning system to move the same away from the tending car.

It is a main object of the present invention to provide an improved textile machine tending apparatus which includes an operator support or operator-carrying platform carried by an overhead crane system supported above the level of the rows of textile machines, and means for operating the crane system to move the operator support platform between and around the rows of textile machines on a regular schedule, the operator support platform being supported in spaced relation above the floor so that it is not necessary to provide tracks on the floor.

It is another object of the present invention to provide an improved textile machine tending and cleaning apparatus which includes a travelling operator support platform and a cooperating pneumatic travelling cleaning system adapted to move along a predetermined route and in a regular schedule between and around the rows of textile machines to insure proper inspection and cleaning of the machines.

In one embodiment of the present invention the travelling operator support platform and the cooperating pneumatic travelling cleaning system are supported together on the overhead crane system so that they move between and around the rows of textile machines on the same schedule and with the same frequency.

In another embodiment of the present invention the travelling operator support platform is carried by and operated from the overhead crane system while the cooperating pneumatic travelling cleaning system is carried by and moves along a separate overhead track supported by and above the rows of textile machines. The cleaning system overhead track is positioned below the overhead crane system so that the travelling operator support platform and the pneumatic travelling cleaning system may operate on different schedules with a minimum of interference with each other.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds when taken in connection with the accompanying drawings, in which:

FIGURE 1 is a somewhat schematic plan view of one bay of a typical spinning mill and illustrating the arrangement of the rows of textile machines in dash-dot lines, the travelling operator support platform and pneumatic travelling cleaning system both being supported on an overhead crane system;

FIGURE 2 is a fragmentary elevational view taken substantially along line **2—2** in FIGURE 1 and illustrating the manner in which the travelling operator support platform is supported by and depends from the crane system as it passes down an aisle between the rows of textile machines;

FIGURE 3 is an isometric view looking down on the carriage of the crane system and illustrating the manner in which the operator support platform and pneumatic cleaning system are supported thereby;

FIGURE 4 is a fragmentary elevational view looking substantially along line **4—4** in FIGURE 2;

FIGURE 5 is a horizontal sectional view taken substantially along line **5—5** in FIGURE 4 and with the floor of the operator platform broken away to illustrate the operation of the guide rollers to control the operation of the broken end detectors;

FIGURE 6 is a sectional plan view of the operator support platform, similar to FIGURE 5, but being taken at a higher elevation;

FIGURE 7 is an isometric view looking upwardly from beneath the crane carriage;

FIGURE 8 is a somewhat diagrammatic wiring diagram;

FIGURE 9 is a plan view of one bay of a typical weave room and illustrating a second embodiment of the present tending and cleaning apparatus with the operator support platform being carried by an overhead crane system and the travelling cleaning system being supported and carried by a separate overhead track supported above the rows of looms;

FIGURE 10 is a fragmentary elevational view at an enlarged scale, being taken substantially along line **10—10** in FIGURE 9; and

FIGURE 11 is a side elevational view of the operator support platform shown in FIGURE 10.

In the first embodiment, shown in FIGURES 1–8, the operator support or operator-carrying platform and the pneumatic cleaning system are both carried by and supported on the overhead crane system and they move together so that they both pass along the rows of textile machines on the same regular schedule. In the second embodiment, shown in FIGURES 9–11, the operator support platform is carried by the overhead crane system which moves and transports the operator along a predetermined route by the textile machines on a regular schedule. In this second embodiment, the pneumatic travelling system is supported and carried by tracks extending above the rows of textile machines, independently of and below the level of the overhead crane system, so that the operator may be carried along one route on a particular schedule while the pneumatic cleaning system may be carried along a separate route on a different schedule.

While the first embodiment is shown operating above rows of spinning frames and the second embodiment is shown operating above rows of looms, it is to be understood that either embodiment may be operated with either type of textile machine. The present tending and cleaning apparatus may also be used with other types of textile machines which require regular surveillance by an

operator and which have a tendency to build up lint and the like which must be cleaned or removed therefrom.

One bay of a typical spinning room is shown in FIGURE 1 with the overhead crane system supported to move above the rows of spinning frames S, shown in dash-dot lines. Generally, the overhead crane system includes a pair of spaced main support rails **20** which extend parallel to the rows of spinning frames and are suitably supported thereabove. A bridge B is supported at opposite ends for movement along the main support rails **20** for movement therealong and longitudinally above the rows of spinning frames S. A carriage C is supported on the bridge B and movable longitudinally therealong. The carriage C supports the pneumatic cleaning system D and the operator-carrying platform E (FIGURE 3) so that they travel along together with operation of the overhead crane system.

It is preferred that the overhead crane system be provided with an automatic driving and indexing control, which operates to move the carriage C along successive rows of the spinning frames S (FIGURE 1) so that the cleaning system D follows the path indicated by the line of arrows **22**, in FIGURE 1, while the operator-carrying platform E follows the path of travel indicated by the dotted lines **23**. Assuming that the tending and cleaning cycle begins with the carriage C in the lower left-hand corner of FIGURE 1, the bridge B will move upwardly to the position shown in solid lines in FIGURE 1 so that the cleaning system D moves up the center of this first row of spinning frames S while the operator is transported along the left-hand side of these spinning frames, along the dotted line **23**. The bridge B will automatically stop as it reaches the end of the first row of spinning frames S and the carriage C will be indexed to the right along the bridge B so that it is then centered above the second row of spinning frames S before the bridge B begins its movement downwardly to the other end of the second row of spinning frames.

Since it is desirable that the operator follow the cleaning system, means (to be presently described) is provided for supporting the operator platform E in such a manner that it may be moved relative to the cleaning system D so that the position in which the platform E is supported on the carriage C may be changed. As the bridge B moves downwardly in FIGURE 1 above the second row of spinning frames S, the operator will be carried along the path **23** in the aisle between the first and second rows of spinning frames and inspect the spinning frames on both sides of the aisle.

It is preferred that the operator-carrying platform E be provided with means for manually stopping the same when the operator detects any malfunction of the machine so that the defect can be remedied. It is also desirable to provide broken yarn end detecting means on the operator-carrying platform E which operates to automatically stop the movement of the platform at a point where an end is down on the spinning frame. The manual means for stopping the platform, as well as the automatic means, will be presently described in more detail.

In some machine arrangements, such as shown in FIGURE 1, it will be necessary for the cleaning system D to move above the last row of machines two times so that the operator may inspect both sides of this last row of spinning frames. For example, when the carriage C reaches the point in its cycle where it is positioned in the upper right-hand corner of FIGURE 1, the operator will have just passed down the aisle between the last two rows of spinning frames and the cleaning system D will have passed upwardly along and over the center of this last row of spinning frames. At this point, the operator-carrying platform E will be positioned on the left-hand side of the cleaning system D and the platform E must be moved around to the right-hand side of the cleaning system as it makes a second path of travel above this last row of spinning frames. The means for supporting and moving the operator-carrying platform E on the carriage C to permit this operation will be presently described.

The bridge B is provided with rails **25** (FIGURE 1) which are held in parallel spaced apart relationship by cross braces **26**. Opposite ends of the rails **25** are suitably supported for movement along the main support rails **20** and driving means is provided for imparting movement to the bridge B longitudinally above the rows of spinning frames S. This bridge driving means includes an electric motor **30** (FIGURE 1) which is supported on one of the rails **25** and drivingly connected to the medial portion of a drive shaft **31**, opposite ends of which rotate friction drive wheels, not shown, that are in driving engagement with the main support rails **20**. The motor **30** is reversible to impart movement in either direction to the shaft **31** and the friction wheels to thereby move the bridge B in either direction along the main support rails **20**.

The carriage C is supported on the bridge B by rollers **33** (FIGURE 2) which ride on the lower webs of the rails **25** and support a suspended frame **35** (FIGURE 7) for movement beneath the bridge B. Drive means is provided for moving the carriage C along the bridge B and includes a reversible electric motor **36** (FIGURE 7) which is suitably supported on the carriage and has a drive shaft **37** connected thereto. The drive shaft **37** is provided with friction wheels **38** that are in driving engagement with the rails **25** of the bridge B. Thus, rotation of the motor **36** will impart movement to the friction wheels **38** to thereby impart movement to the carriage C in either direction along the rails **25** of the bridge B.

The cleaning system D includes a fan housing **40** having downwardly extending blowing tubes or trunks **41** and suction tubes or trunks **42**. As best shown in FIGURE 2, the blowing tubes **41** are provided with air exit nozzles which direct streams of air under pressure onto opposite sides of the spinning frame as the blowing tubes **41** move longitudinally along each side of the spinning frames. The lower end of the suction tube **42** is provided with an outwardly flanged nozzle which moves along closely adjacent the floor F (FIGURE 2) to pick up and remove any lint dislodged from the machine by the blowing tubes **41**.

The blowing and suction tubes **41, 42** are preferably formed of flexible material so that if they engage a fixed object, they will bend and pass around or over the same as they travel down opposite sides of the spinning frame S. A motor **45** is provided in the fan housing **40** to impart rotation to fan blades, not shown, for supplying the air under pressure in the tubes **41** and for creating a suction in the tubes **42**.

The frame **35** of the carriage C (FIGURES 3 and 7) supports a substantially square closed track **50** in a horizontal position. The operator-carrying platform E is supported for movement on the track **50** by means of a hanger bracket **51** which extends upwardly on opposite sides of the track **50** and is provided with support rollers **52** which engage the lower web of the track **50** (FIGURE 4). A reversible motor **53** is supported on the hanger bracket **51** and drives a friction drive wheel **55** (FIGURE 2) to move the hanger bracket **51** and the depending operator-carrying platform E along the track **50**. It will be noted in FIGURE 3 that opposite side portions of the track **50** are curved outwardly so that the platform E is moved out around cleaning tubes **41, 42** as the platform E moves from one position to the other, relative thereto.

The operator-carrying platform E is supported for rotation on the hanger bracket **51** by means of a rotatable gear **56** (FIGURE 4) that is engaged by the drive gear of an electric motor **57**, suitably supported on the hanger bracket **51**. A support frame **60** is connected to the lower portion of the rotatable gear **56** for pivotal movement in one direction. The lower end of the frame **60** is suitably connected to and supports a horizontal platform **62**, the lower portion of which is spaced above the floor F. An operator seat **63** is supported on the platform **62** for sup-

porting the operator as the platform E moves along and between the spinning frames S.

Broken end detector devices broadly indicated at **65** are supported by the frame **60** of the platform E. These detector devices **65** (FIGURES 2 and 6) may be of any suitable type which operate to detect broken yarns as the platform E moves along the textile machines and to automatically stop the platform E upon detection of a broken yarn. In the present instance, the detectors are illustrated as including thin wire feelers **66** which are bent in a rearward direction, relative to their path of travel. The outer ends of the wire feelers **66** resiliently engage the yarns Y as they are being twisted and remain in the solid line position shown in FIGURE 6 as long as the yarns are not broken and are being properly twisted. When one or more of the yarns are broken, the feeler **66** will move to the dotted line position shown in FIGURE 6.

Switch means, to be described in connection with FIGURE 8, is associated with each of the detectors **65** and operates to stop the movement of the platform E when a broken yarn is detected. Control means for controlling the operation of the detectors **65** is also provided so that they are operable only when they are moving past the points at which the yarns Y are being twisted. For example, this control means prevents operation of both detectors **65** as the platform passes from one spinning frame to the next spinning frame in the same row, it prevents operation of both detectors **65** when the operator-carrying platform E is moving around the end of a row of spinning frames, and also prevents operation of the outermost detector when the operator-carrying platform E is moving along an outside row of spinning frames.

In the present instance, the detector control means includes rollers **70** (FIGURE 5) which are supported on the outer ends of control levers **71** and adapted to engage control rails **72** carried along the lower portions of each side of each of the spinning frames S. The control levers **71** are pivotally supported intermediate their ends on the platform **62** and their inner ends are connected to tension springs **74**. The control levers **71** and rollers **70** are normally urged to the dotted line position shown in FIGURE 5, except when they are engaged by a control rail **72**. When rollers **70** are not in engagement with the control rails **72**, the control levers **71** engage and close microswitches **75***a* which are supported in the horizontal platform **62**.

The microswitches **75***a* control the operation of the corresponding detectors **65**, in a manner to be presently described in connection with the wiring diagram of FIGURE 8. The rollers **70** engage the control rails **72** at any time that the detectors **65** are in position to engage the yarn ends on the spinning frame so that the corresponding detector **65** is operable to detect broken yarns and stop the operator-carrying platform E as it moves along the spinning frames. When the rollers **70** move out of engagement with the control rails **72**, the detectors **65** are rendered inoperable. The outermost detector **65** will thus be inoperative as the operator-carrying platform E moves down the first and last row of spinning frames, and both detectors **65** will be inoperative when the operator-carrying platform E moves around the ends of rows of spinning frames, and moves from one spinning frame to the next.

The operator-carrying platform E is also provided with means for manually stopping movement of the same and in the present instance, a foot pedal **75** (FIGURES 4 and 6) is provided on the horizontal platform **62** and connected to a switch for overriding the automatic control of the overhead crane system, in a manner to be presently described. A hand lever **76** (FIGURE 6) operates a switch to control rotation of the reversible motor **53** and thereby control movement of the operator-carrying platform E on the track **50** which is carried by the carriage C. Another hand lever **77** operates a switch to control rotation of the reversible motor **57** and thereby control the rotational position of the operator-carrying platform E, relative to the carriage C.

Electrical current is supplied to both the platform positioning motors **53, 57** (FIGURE 4) and the cleaning system fan motor **45** by means of conductors **80** which are supported on the upper portion of the track **50** (FIGURE 3). The main rails **20** and bridge rails **25** of the crane are provided with similar conductors, not shown, to supply electrical current to the conductors **80** and the crane motors **30, 36**.

As shown in FIGURE 8, an automatic crane indexing control unit **81** normally supplies electrical current to and controls operation of the reversible bridge motor **30** and the reversible carriage motor **36** to automatically move the bridge B and the carriage C through a predetermined cycle so that the platform E travels a predetermined route on a regular schedule through the bay of spinning frames. As shown in FIGURE 1, the crane carriage moves the cleaning system D along the path **22**, unless it is necessary or desirable to stop the carriage. Main electrical lines **82, 83** are connected at one end to a suitable source of electrical energy, not shown, and at their other ends to control unit **81** and normally supply electrical current thereto in a continuous manner. The line **83** is provided with a relay switch **84** which is at times opened, in a manner to be presently described, to thereby break the circuit to the automatic crane indexing control **81** and stop the movement of the bridge, the carriage and the fan motor **45** which is suitably connected to the control **81**. The manual control lever switch **77** (FIGURES 2, 3 and 7) is connected to the reversible motor **57** by means of wires **84, 85** and to a secondary line **86** by a wire **87**. A wire **88** connects electric motor **57** to a secondary line **89**. Thus, movement of the lever **77** in either direction will impart movement in a corresponding direction to the motor **57** to thereby rotate the operator-carrying platform E to the desired extent.

The manual control lever switch **76** is connected to the reversible electric motor **53** by wires **90, 91** and to the secondary line **86** by a wire **92**. The electric motor **53** is connected to the secondary line **89** by a wire **93**. Thus, movement of the lever switch **76** will impart rotation in a corresponding direction to the motor **53** to thus move the operator-carrying platform E along the track **50** to the desired position.

When the platform E is moving along a spinning frame, it is sometimes desirable to manually stop the same and for this purpose, the foot switch **75** may be depressed to open the circuit between a wire **94** (connected to the secondary line **89**) and a wire **95** (connected to one side of a relay **96**). A wire **97** connects the relay switch **96** with another relay switch **98** and a wire **100** connects the relay switch **98** to one side of the solenoid of the relay switch **84**. The other side of the solenoid of the relay switch **84** is connected to the secondary line **86** by a wire **101**. The relay switch **84** is normally maintained in the closed position shown by energization of the solenoid coil associated therewith and when the foot switch **75** is depressed, this will break the circuit to the solenoid coil and the relay switch **84** will open to break the circuit to the automatic crane indexing control **81** and stop the carriage motor **36**, the bridge motor **30**, and the fan motor **45**.

The relay switches **96, 98** are provided to automatically stop the platform E when a broken yarn is detected by one of the detectors **65** (FIGURE 8). The detector **65** on the right-hand side of the platform E controls the operation of the relay **98** and maintains the same in the closed position shown, as long as the roller **70** of the corresponding control lever **71** is in engagement with the plate **72** so that the switch **75***a* remains open. As soon as the roller **70** moves out of engagement with the plate **72**, the switch **75***a* is moved to the closed position by the lever **71** to maintain the relay **98** in a closed position, regardless of the position of the corresponding detector **65**.

Thus, the switch **75***a* overrides the operation of the detector **65** when the platform E is passing between spinning frames, is moving around one end of a row of spinning frames and when only the one side of the platform E is moving next to a spinning frame. The detector **65** and switch **75***a* at the left-hand side of the platform E (FIGURE 8) control operation of the relay **96** in the same manner as the corresponding detector and switch, on the right-hand side of the platform E, control the operation of the relay switch **98**. Switches **65***a* (FIGURE 8) are operated by detectors **65** and are connected to the relays **96**, **98** so that when they are opened, as when a broken yarn is detected, the relays **96**, **98** move to the open position and break the circuit to the indexing control unit **81** to stop the platform E.

In the embodiment of the tending and cleaning apparatus shown in FIGURE 9, a plan view of one bay of a typical weave room is shown with the operator-carrying support platform, indicated at E', being carried by the overhead crane system. This overhead crane system is of the same type as that described in connection with the embodiment shown in FIGURES 1–8 except that it does not support the cleaning apparatus and the same reference characters will be used for corresponding parts with the prime notation added.

The overhead crane system shown in FIGURE 9 is provided with an automatic crane indexing control to move the carriage C' and the operator-carrying support platform E' along a predetermined path through the weave room and on a regular schedule so that the operator will patrol the operation of the machines in a regular manner. With the layout of looms as shown in FIGURE 9, the automatic crane indexing control may be operated to move the operator-carrying support platform in a path of travel, as indicated by the pathway **23'**. The looms L are preferably arranged in pairs of rows with the cloth rolls facing each other along an aisle, which is normally referred to as the weaver's alley. The warp beams W of the looms face each other across an aisle, which is normally referred to as the fixer's alley. In FIGURE 10, the operator-carrying support platform E' is shown in the fixer's alley and the looms on opposite sides are arranged with the warp beams W facing each other.

The cleaning apparatus, broadly indicated at D', may be of any suitable type, and is shown as being of the type disclosed in copending application Ser. No. 367,323, filed May 14, 1964, now Patent No. 3,304,570, and reference may be made to this application for further details. The cleaning apparatus is supported for movement along a track T of the type shown in said copending application. The track T forms a closed loop supported above adjacent pairs of rows of looms (FIGURE 9) and in this case there are three closed loop, tracks T. Each of the tracks T supports a cleaning apparatus D' which moves around the tracks T and may be provided with reciprocating downwardly depending air nozzles or tubes **106**, **107**, **106'** and **107'** (FIGURE 10) which remove lint and the like from the looms L. If desired, a suction nozzle apparatus, not shown, may be moved along the tracks T to remove the dislodged lint from the floor.

The cleaning system support tracks T are positioned below the level of the crane system so that the operator-carrying support platform E' may move along the pathway **23'** without interference with the cleaning apparatus D' and they may operate on the same schedule or the cleaning apparatus D' may move at a faster or slower rate than the operator-carrying support platform E'.

As shown in FIGURES 10 and 11, the operator-carrying support platform E' is suspended from the frame **35'** of the carriage C' in a slightly different manner from that disclosed in connection with the first embodiment shown in FIGURES 1–8. In the present instance, a pair of downwardly depending support posts **60'** supports the operator-carrying platform **62'** above the floor F'. The operator may face in any direction and since it is not necessary to position the operator-carrying platform E' relative to the cleaning apparatus, the platform is not supported for rotation or for movement on the carriage C'.

Control means, not shown, is preferably provided on the operator-carrying platform E' to override the automatic indexing control of the crane system so that the platform E' may be stopped by the operator at any time, as when defects in the looms must be repaired and the regular patrolling schedule will then be interrupted for a short time, until the condition is corrected. It may also be desirable to have manual controls for the operator to control the indexing of the crane system and then the operator can proceed through the weave room in any desired path.

In accordance with the first embodiment of the present invention, the cleaning system and the tending system are each carried by the crane system and operate together. On the other hand, in the second embodiment, the tending system and the cleaning system may be operated on different schedules.

In the drawings and specification there have been set forth preferred embodiments of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claims.

We claim:

1. A traveling apparatus for facilitating the movement of an operator tending a plurality of textile machines arranged in parallel rows and comprising:

a pair of spaced apart main support rails, each extending parallel to the rows of textile machines,

a bridge supported on said pair of rails for movement therealong longitudinally of and above the rows of textile machines, said bridge extending transversely of and spanning at least two rows of textile machines and at least one working aisle therebetween,

means for driving said bridge along said pair of rails for traveling said bridge along the rows of textile machines,

a carriage supported on said bridge for movement therealong transversely of and above the rows of textile machines,

means for driving said carriage along said bridge to position said carriage in predetermined relation to a row of textile machines spanned by said bridge,

an operator support platform carried by and depending from said carriage and positioned to move at the level of the textile machines, and

means for controlling said drive means for moving said platform along and about the rows of textile machines and transporting an operator riding on said platform along a predetermined route and including means carried by said platform and operably by an operator for interrupting movement of said platform along said route.

2. A structure according to claim **1** and wherein said control means further includes detector means carried by said platform and operable in response to a predetermined defective condition of said textile machines for interrupting movement of said platform along said route.

3. A structure according to claim **2** wherein said detector means is positioned on each side of said platform and operable in response to a predetermined defective condition of a textile machine when the platform is moving between rows of textile machines, and including actuator means operatively associated with each detector means for controlling the operation thereof, said actuator means being operable to selectively render said detector means inactive when a textile machine is not present on the corresponding side of said platform.

4. A structure according to claim **1** and further comprising pneumatic travelling cleaning means, means supporting said cleaning means for movement above the rows of textile machines to remove lint and the like therefrom,

and means for imparting movement to said cleaning means in timed relation to the movement of said operator support platform.

5. A structure according to claim 4 wherein said cleaning means support means includes a fixed overhead track supported above the rows of textile machines and below said carriage, said cleaning means being supported on sadi overhead track for movement along the rows of textile machines, and drive means for imparting movement to said cleaning means independently of movement of said platform along the rows of textile machines.

6. A structure according to claim 1 and further comprising pneumatic cleaning means carried by and depending from said carriage for movement therewith above the rows of textile machines to remove lint and the like therefrom.

7. A structure according to claim 6 wherein said carriage includes an endless track supported in encircling relationship with said cleaning means, means supporting said platform on said endless track, and means for moving said support means along said endless track to change

the position of said platform relative to said cleaning means.

8. A structure according to claim 7 including means carried by said support means for rotating said platform relative to said cleaning means.

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