

May 6, 1958

O. D. BABINEAU

2,833,333

LINEMAN'S PORTABLE POLE SEAT

Filed April 22, 1955

Fig. 1.

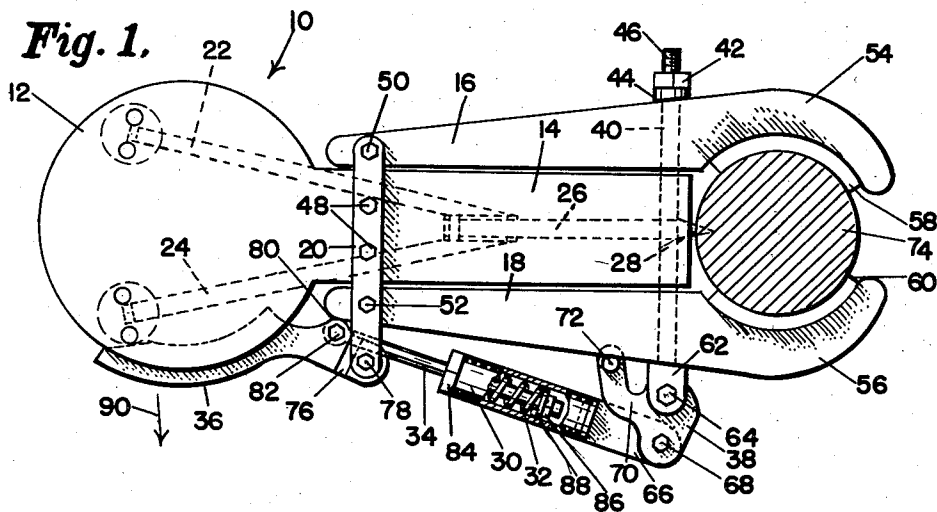


Fig. 2.

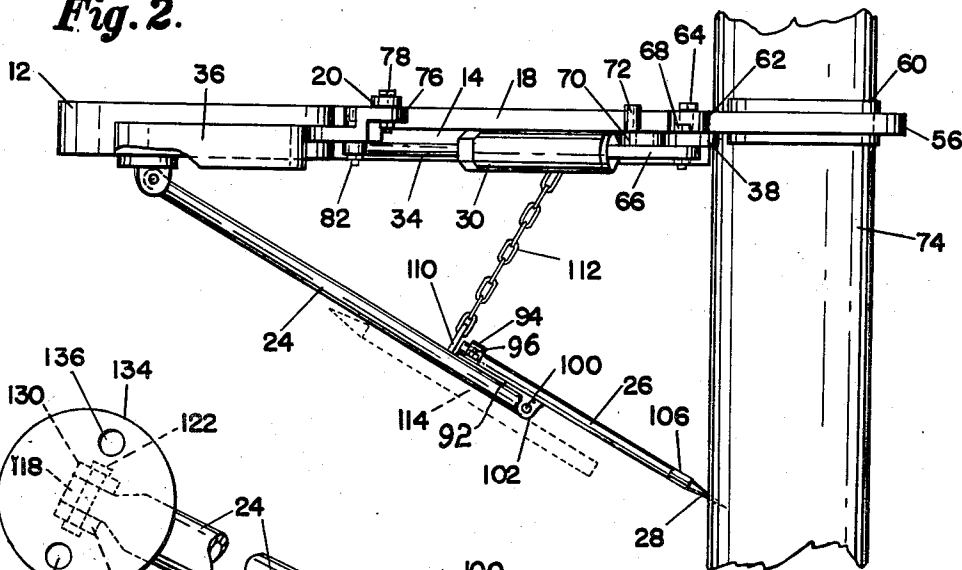
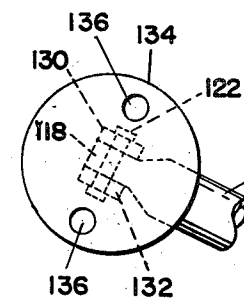
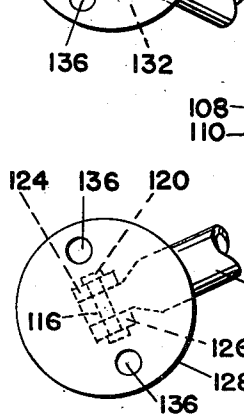


Fig. 3.

INVENTOR.
O.D. Babineau
BY *Arthur H. Sturges.*
Attorney

1

2,833,333

LINEMAN'S PORTABLE POLE SEAT

Oliver D. Babineau, Colorado Springs, Colo.

Application April 22, 1955, Serial No. 503,181

3 Claims. (Cl. 155—78)

This invention relates to portable platforms or temporary scaffolds adapted to be used on poles such as telephone and telegraph poles or poles for high tension and other electric wires; and in particular a seat for linemen in which the seat is provided with pole gripping jaws and a diagonally disposed brace wherein with the jaws locked in gripping relation with the pole by a toggle acting latch and a point on the lower end of the brace extended into the pole a lineman has the assurance that the seat may be used with safety.

The purpose of this invention is to provide a positive seat for use by linemen working on poles so that the necessity of linemen supporting themselves on spurs and with a body belt is obviated.

In numerous instances it is necessary for a lineman working on wires at the top of a pole to remain on the pole for hours at a time and the conventional spurs and body belts become very uncomfortable after even short periods of time. Furthermore it is frequently necessary to draw tools, wires and the like by cords from the ground and where the lineman is supported by a belt or strap and spurs it is sometimes difficult to have both hands free for operating the cord.

With these thoughts in mind this invention contemplates a seat and means for rigidly supporting the seat on a pole whereby the seat is adapted to be readily installed on a pole and also readily removed or changed to a different position by a lineman suspended in position on the pole by spurs and the like.

The object of this invention is, therefore, to provide a seat for use on a pole wherein the seat is collapsible and whereby the seat is adapted to be readily set up for use.

Another object of the invention is to provide a portable seat for use by linemen on poles in which the seat is adapted to be positively secured in position on a pole.

Another important object of the invention is to provide a portable seat for use on a pole wherein the seat is adapted to be set up and installed by a single operator.

A further object of the invention is to provide a seat for use by linemen on a pole in which means is provided for bracing the seat from a point below the point where the seat is secured to the pole.

A still further object of the invention is to provide a portable seat for use by linemen on a pole which relieves both hands of the linemen so that both hands may be used for operations on the pole.

And a still further object is to provide a collapsible seat adapted to be readily set up and used by linemen on a pole in which the seat is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a seat having a tongue extended therefrom with pole gripping jaws swingably mounted at the sides of the tongue, with toggle acting latching elements for locking the jaws in engagement with a pole, and with a diagonally disposed brace having a pointed lower end pivotally connected to the seat and adapted to be positioned with the point extended into a pole whereby

2

the brace coacts with the jaws for suspending the seat in a horizontal position at one side of the pole.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings, wherein:

Figure 1 is a plan view of the improved lineman's portable pole seat with part of a spring cylinder thereof broken away and parts shown in section, and illustrating the use of the device with the jaws thereof gripping a pole, the pole being shown in section.

Figure 2 is a side elevational view of the seat also showing the seat suspended from a pole.

Figure 3 is a view showing a diagonally disposed brace for supporting the seat in an extended position, looking upwardly toward the under side of the brace, and showing the parts on an enlarged scale and with parts broken away.

While one embodiment of the invention is illustrated in the above referred to drawings, it is to be understood that they are merely for the purpose of illustration and that various changes in construction may be resorted to in the course of manufacture in order that the invention may be utilized to the best advantage according to circumstances which may arise, without in any manner departing from the spirit and intention of the device, which is to be limited only in accordance with the appended claims. And while there is stated the primary field of utility of the invention, it remains obvious that it may be employed in any other capacity wherein it may be found applicable.

In the accompanying drawings, and in the following specification, the same reference characters are used to designate the same parts and elements throughout, and in which the numeral 10 refers to the invention in its entirety, numeral 12 indicating the seat, numeral 14 a tongue extended from the seat, numerals 16 and 18 jaws positioned at the sides of the tongue and swingably connected to a bar 20 extended across and secured to the tongue, numerals 22 and 24 arms of a diagonal brace 26 having a point 28, and numeral 30 a cylinder for a spring 32 from which a connecting rod 34 extends to a handle 36, the opposite end of the cylinder being connected to a latch 38 that is pivotally connected to a rod 40 which extends through the jaws 16 and 18 and tongue 14 and which is secured in position with a nut 42 and washer 44 on the opposite or threaded end 46.

The seat 12, which is circular, is formed of any suitable material, and the tongue 14, which is integral therewith, is also formed of wood, plastic, metal or other suitable material. The bar 20 is secured to the tongue 14 with bolts 48, and the bar is pivotally connected to the jaw 16 with a bolt 50 and to the jaw 18 with a bolt 52. The jaw 16 is provided with an arcuate gripping end 54 and the jaw 18 is provided with a similar end 56. The ends 54 and 56 are lined with friction gripping pads 58 and 60, respectively, to insure positive gripping and the pads may be formed of rubber or other resilient gripping material.

The latch 38 is pivotally connected to a clevis 62 on the end of the rod 40 with a bolt 64, and similarly connected to a bar 66 extended from the cylinder 30 with a bolt 68. An arm 70, extended from the latch 38 is provided with a pin 72 that is positioned to bear against the back of the jaw 18 forming a fulcrum for the latch and providing an assembly of toggle acting levers positioned to urge the jaws into gripping relation with a pole 74 as the handle 36 is snapped against the seat 12, as shown in Figure 1. A lug 76 extended from the handle, is pivotally connected to the bar 20 with a bolt 78 and an ear 80 on one side of the handle is pivotally connected to the connecting rod 34 with a bolt 82. The connecting rod extends through a head 84 on the end of the

cylinder, and the end of the rod that extends through the spring is provided with a nut 86 and a washer 88, the washer providing a seat for the end of the spring 32.

With the parts positioned as shown and described moving the handle outwardly, such as in the direction of the arrow 90 carries the center of the bolt 82 over the center of the bolt 78 whereby the latch is released so that the seat may be removed from the pole, and moving the handle back in the opposite direction moves the bolt 82 over the center of the bolt 78 locking the latch and thereby securing the jaws in gripping relation with the pole.

The arms 22 and 24 of the diagonally disposed brace extend from a mounting plate 92 which is connected to the upper end of the spike or lower section 26 of the brace with a U-shaped clamp 94 that extends over the end of the spike and that is secured to the plate 92 with bolts 96, and the lower section 26 is also provided with a tongue 98 that is pivotally connected by a pin 100, to bearings 102 and 104 which extend from the end of the plate 92, as shown in Figure 3.

The end of the spike on which the point 28 is positioned is provided with a cleat 106 that is positioned to receive the foot of an operator for forcing the point into a pole, and the upper end of the mounting plate 92 is provided with a web 108 in which a hook or an eye 110 is secured and, as shown in Figure 2, the eye is secured to the lower end of a chain 112, the upper end of which is secured to the under side of the tongue 14. The chain provides means for limiting downward movement of the brace. With the parts formed as shown and described the spike or lower section of the brace is adapted to fold to the position indicated by the dotted lines 114 when the seat is collapsed.

The upper ends of the arms 22 and 24 are provided with tongues 116 and 118 that are pivotally secured by pins 120 and 122 between ears 124 and 126 of a plate 128, and ears 130 and 132, respectively, of a plate 134, also as shown in Figure 3. The plates 128 and 134 are provided with openings 136 for screws or the like by which the plates may be secured to the under surface of the seat 12.

With the parts designed and assembled as shown and described the improved seat of this invention may be collapsed and carried up a pole by a lineman, and as the lineman reaches an elevation at which work is to be performed the seat is opened and, with the jaws extended around the sides of a pole, the handle 36 is snapped inwardly against the seat forcing the jaws into gripping relation with the pole, and with the diagonally disposed brace dropped downwardly the point is forced into the pole, and the seat is rigidly supported so that a lineman may rest or stand thereon with comfort. After use the seat may readily be collapsed and lowered with a rope or the like to the ground.

From the foregoing specification, it will become apparent that the invention disclosed will adequately accomplish the functions for which it has been designed and in an economical manner, and that its simplicity, accuracy, and ease of operation are such as to provide a relatively inexpensive device, considering what it will accomplish, and that it will find an important place in the art to which it appertains when once placed on the market.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Changes in shape, size, and rearrangement of details and parts, such as come within the purview of the invention claimed may be resorted to in actual practice, if desired.

Having now described the invention that which is claimed to be new and desired to be procured by Letters Patent, is:

1. A lineman's portable pole seat comprising a circular piece of material having a tongue extended therefrom, pole gripping jaws pivotally connected to the tongue and positioned on opposite sides thereof, toggle acting elements including a rod extended through the jaws and tongue of the circular piece of material, a latch pivotally connected to one end of the rod, said latch having an arm with a jaw engaging pin therein extended from one side, a handle pivotally connected to a bar extended from said tongue, and a member having a resilient element therein connecting the latch to the handle with the connection of the said member to the handle positioned to pass over the center of the pivotal connection of the handle to the bar with said toggle elements actuated to a latching position for locking the jaws in gripping relation with the pole, and a folding brace pivotally connected to the under side of the circular piece of material and having a point on the extended end for supporting the seat from a pole.

2. In a support for use on a pole, the combination which comprises a seat having a tongue extended therefrom, pole gripping jaws positioned on the sides of said tongue, a transverse bar secured to the tongue, means pivotally connecting the jaws to the bar, said jaws having arcuate pole gripping ends with friction linings, a transverse rod extended through the tongue and jaws, connected toggle acting levers connected to the rod, a latch pivotally connected to the rod and having a pin positioned to bear against one of the jaws providing a fulcrum for the toggle acting levers, a handle pivotally mounted on the bar and operatively connected rearwardly of the handle pivot to the toggle acting levers for actuating the levers to lock the arcuate ends of the jaws into gripping relation with a pole, and a folding diagonally disposed brace having a point on the lower end pivotally connected to the seat.

3. In a lineman's portable pole seat, the combination which comprises a circular seat having a tongue extended therefrom, pole gripping jaws positioned at the sides of the tongue, a transverse bar secured to the tongue and extended over the jaws, bolts pivotally connecting the jaws to the bar, a transverse rod extended through the tongue and jaws, said jaws having arcuate pole gripping ends, resilient linings on the inner surfaces of the ends of the jaws, a latch pivotally connected to the rod and having a pin on an arm extended therefrom, the pin being positioned whereby it is in engagement with one of the jaws providing a fulcrum for the latch assembly, a spring cylinder connected to the latch, a handle pivotally mounted on the bar secured to the tongue and adapted to nest against the seat, a connecting rod extended from the spring cylinder to the handle rearwardly of the handle pivot, and a folding brace having a point on the extended end pivotally connected to the under surface of the seat for supporting the seat in a horizontally disposed position, said brace being connected by a chain to the tongue extended from the seat for limiting downward movement of the brace.

References Cited in the file of this patent

UNITED STATES PATENTS

2,394,203	Pruder	Feb. 5, 1946
2,512,174	Roeder	June 20, 1950

FOREIGN PATENTS

396,969	Germany	June 13, 1924
---------	---------	---------------