

Nov. 8, 1949

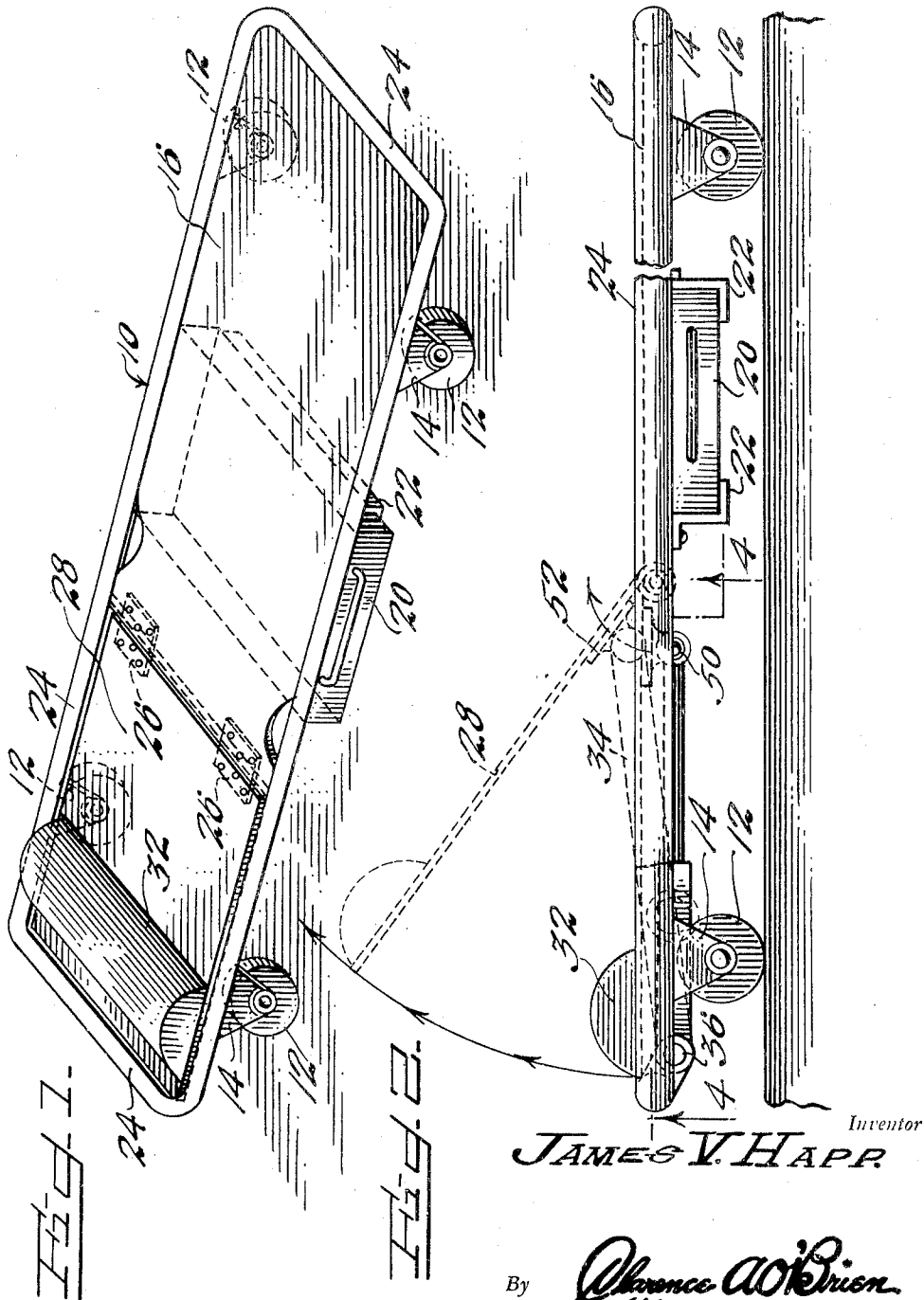
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2,487,706

REPAIRMAN'S CREEPER

Filed Dec. 13, 1946

3 Sheets-Sheet 1



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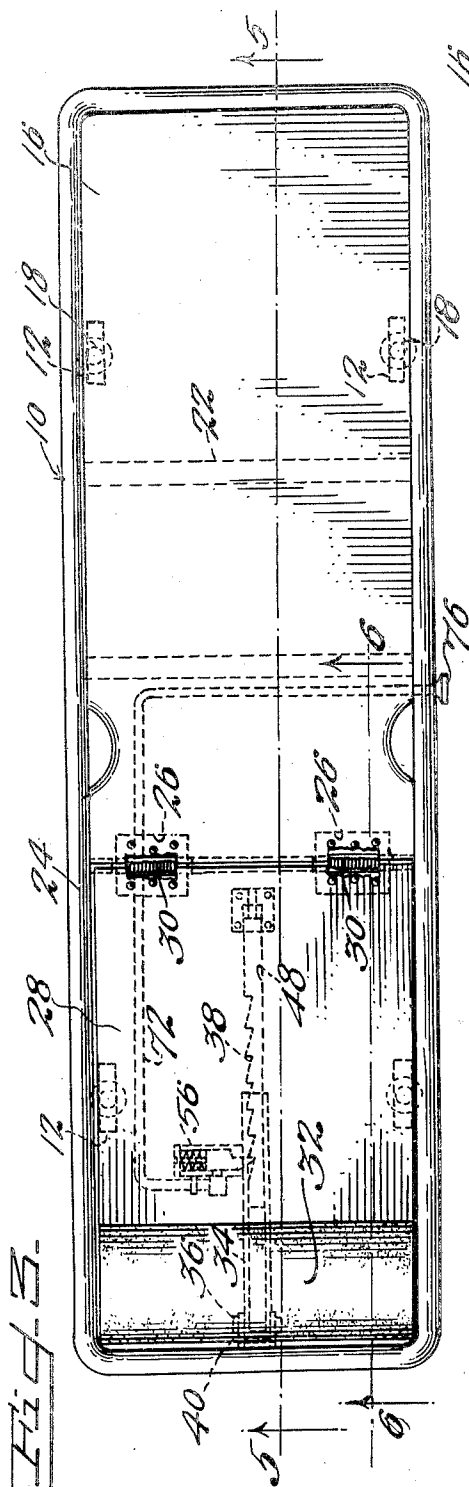
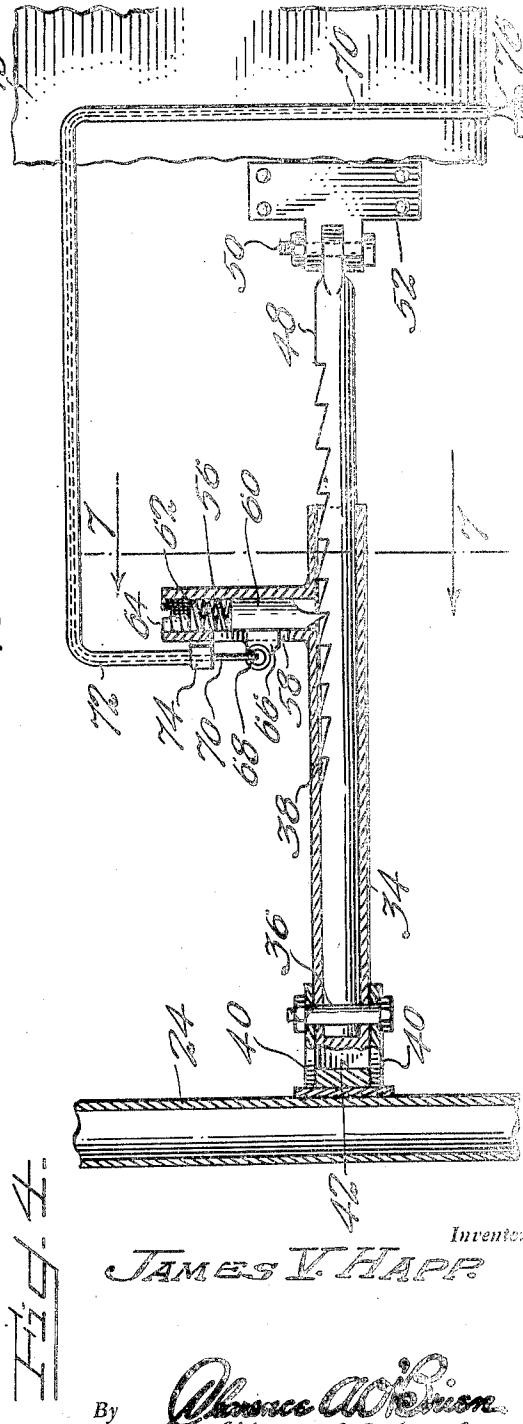
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2,487,706

REPAIRMAN'S CREEPER

Filed Dec. 13, 1946

3 Sheets-Sheet 2



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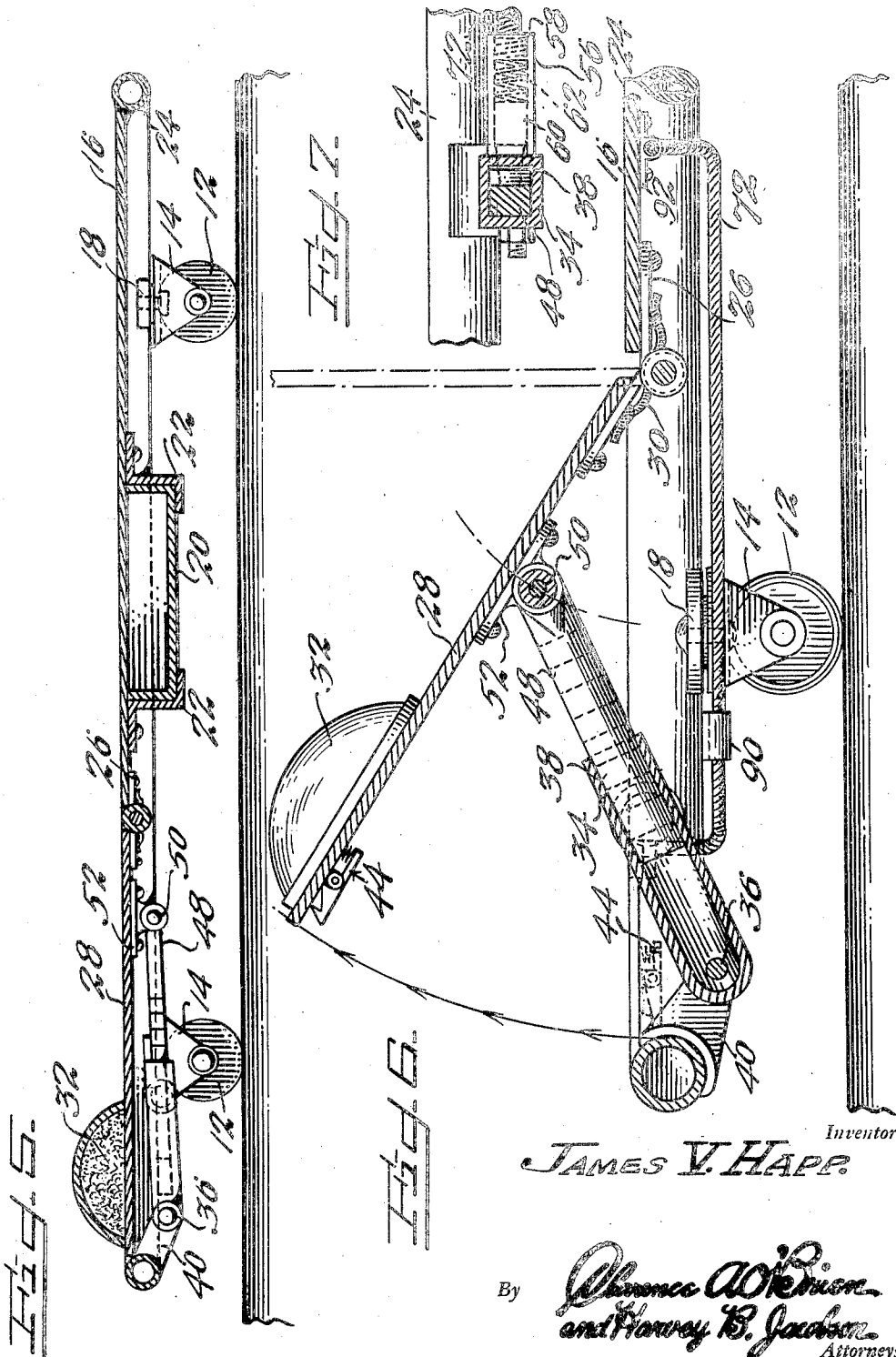
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Filed Dec. 13, 1946

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UNITED STATES PATENT OFFICE

2,487,706

REPAIRMAN'S CREEPER

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Application December 13, 1946, Serial No. 716,085

3 Claims. (Cl. 280—61.5)

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This invention relates to improvements in creepers used in the repair of automobiles, busses or trucks and the like.

An object of this invention is to provide novel adjustable back rest means therein.

Another object of this invention is to provide resiliently biased locking means for said back rest means.

Another object of this invention is to provide an improved control means for said locking means.

A further object of this invention is to provide in a convenient location therein a holder for tools and small parts.

Other objects of the present invention shall become readily apparent to those skilled in the art, upon following the specification and claims.

In the drawings:

Figure 1 is a perspective view of the device embodying the instant invention.

Figure 2 is a side elevation of the invention showing the travel of the head rest and the utility drawer.

Figure 3 is a plan view of Figure 2.

Figure 4 is a view of the ratchet, ratchet pin and ratchet pin actuating means forming part of this invention and taken on the line 4—4 of Figure 2.

Figure 5 is a longitudinal section taken on the line 5—5 of Figure 3.

Figure 6 is a longitudinal section taken on the line 6—6 of Figure 3 showing in enlarged detail the ratchet tube and rod, and clamping means forming part of this invention.

Figure 7 is a view taken on the line 7—7 of Figure 4 showing the spring loaded ratchet pin therein.

Similar reference characters designate similar parts in the several views of the invention.

The invention is designated generally by reference character 10. Taking Figure 2 as being most descriptive, casters 12 are secured by brackets 14 which are pivotally mounted on base 24 by stud shafts 18 as is well known in the art.

A drawer 20 is slidably secured to brackets 22 which are, in turn, anchored to body member 16. Drawer 20 is located as shown, in a position affording convenient access thereto while working under a vehicle. A substantially rectangular base member 24 forms a foundation whereon body member 16 is rigidly secured. To one end of body member 16 a pair of hinges 26 are fastened as by means of screws or rivets or the like. To the other ends of said hinges is secured a second body member 28 which is pivoted about the axis

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of the hinges 26. A pair of torsion springs 30 reacting on the body member 16 and hinged body member 28 are provided on the hinges thereby biasing the member 28 upward with respect to base member 24. A head rest 32 is provided for obvious reasons on the end of member 28.

Considering now Figure 4 which appears to be most descriptive for the explanation hereinafter, a tube 34 shown in the drawings as rectangular in cross section merely for convenience, is apertured at one end transversely for receiving a stub shaft 36 about which said tube is pivoted. A pair of shackle arms 40 mounted on the tube 24 are provided to receive stub shaft 35. A tie member 42 is secured across the said shackles and provides a mating member for the latch to be hereinafter described. A ratchet geared rod 48 having teeth 38, is provided on stub shaft 50 which is, in turn, received in clamp 52 anchored by suitable means to member 28.

A nipple or sleeve 56 is provided in tube 34 having a slot 58 in the side thereof; nipple 56 is provided with screw threads in the top thereof adapted to receive a threaded plug 64. A ratchet pin is inserted in the nipple with a spring 62 reacting on plug 64 and pin 60 at all time biasing the pin toward the ratchet arm 48. Integral with said pin 50 is a flange 66 adapted to protrude through the slot 58. On the ends of the flange 66 is a ring 68 into which a Bowden wire 70 is secured. A housing 72 containing the wire 70 is fastened to the nipple by means of a clamp 74. The housing 72 extends as shown under the creeper to a convenient place on the edge of said creeper where the housing terminates and the wire 70 extends with a suitable grip means 76 therein. Suitable clamps 90 and 92 are provided to anchor the said housing in several places where good mechanical design dictates. The operation of the above discussed mechanism is self-evident. Ratchet pin holding the ratchet rod 48 in a fixed position can be released by pull exerted on grip 76 causing the spring hinges to push the adjustable member 28 upward.

In order to effect a substantially plain surface between members 16 and 28, a spring biased latch generally designated by 44 is provided on member 28 which is adapted to mate with tie member or keeper 42. By clamping member 28 down in this manner a substantially flat surface is obtained as shown in Figure 5 when desired by a worker using the present invention.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor

changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim is:

1. In a repair creeper, a roller platform comprising a base having a rail extending therearound, said base having an element which is resiliently and hingedly mounted to a relatively stationary portion of said base, means for adjusting said hinged element relative to said stationary portion comprising a plurality of springs cooperating with said element and said stationary portion, an apertured tube pivotally mounted on said rail, a rod received in said tube and pivotally mounted on said element and having teeth for ratchet engagement, a sleeve secured to said tube and communicating with the aperture, a spring loaded ratchet pin mounted in the aperture in said tube and received in said sleeve, for locking engagement with said tube and rod, a spring in said sleeve and seated on said pin for urging said pin into engagement with the teeth, a cable secured to said pin for actuation of said pin, and means for limiting the travel of said pin.

2. A repair creeper comprising a roller platform including a base having side rails extending therearound, said base being formed of a relatively stationary portion and a back rest element hinged thereto, springs reacting on the portion and element for hingedly urging said element upward relative to the portion, means for adjusting said element relative to said portion comprising an arm secured to said rail, a tube having an aperture, means for pivotally securing one end of said tube to said arm, a rod having gear teeth formed thereon, means for pivotally securing one end of said rod to said back rest element, a sleeve secured to said tube and communicating with the aperture, a pin slidably received in said sleeve and engaging said teeth, resilient means in said sleeve and seated on said

pin for urging said pin against said teeth, a cable attached to the base portion, means secured to said pin and extending through said sleeve for connecting the said cable and said pin.

3. A repair creeper comprising a roller platform including a base having side rails extending therearound, said base being formed of a relatively stationary portion and a back rest element hinged thereto, springs reacting on the portion and element for hingedly urging said element upward relative to the portion, means for adjusting said element relative to said portion comprising an arm secured to said rail, a tube having an aperture, means for pivotally securing one end of said tube to said arm, a rod having gear teeth formed thereon, means for pivotally securing one end of said rod to said back rest element, a sleeve secured to said tube and communicating with the aperture, a pin slidably received in said sleeve and engaging said teeth, a closure in one end of said sleeve, a spring having one end seated on said pin and the other end engaging said closure for normally biasing said pin into operative engagement with the teeth, said sleeve being formed with a slot, a lug secured to said pin and extending through said slot, flexible means secured to said base and said lug for urging the pin against the compressive force of the last mentioned spring in actuation of the back rest portion.

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