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C. M. MOHLER

CREEPER FOR AUTOMOBILE MECHANICS

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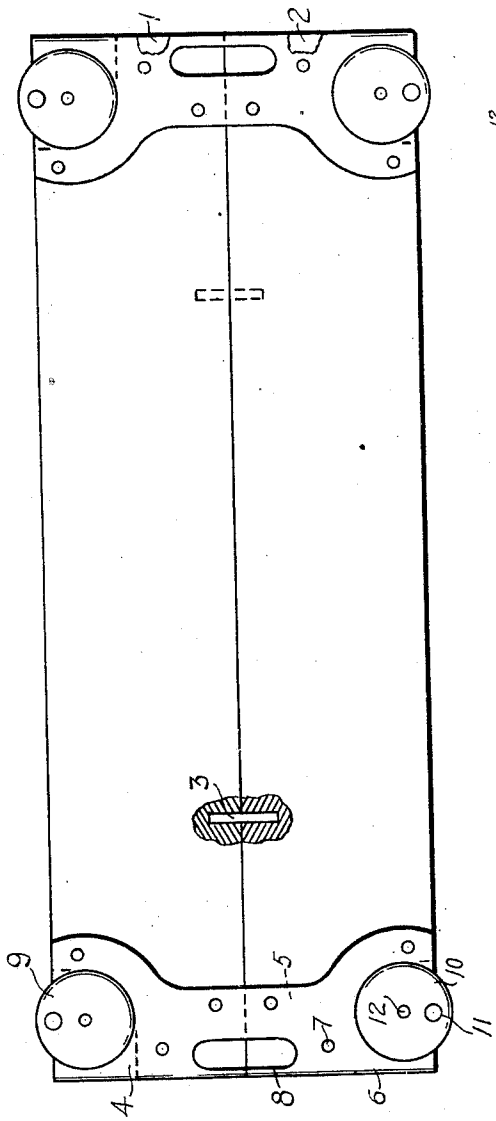

Fig. 1

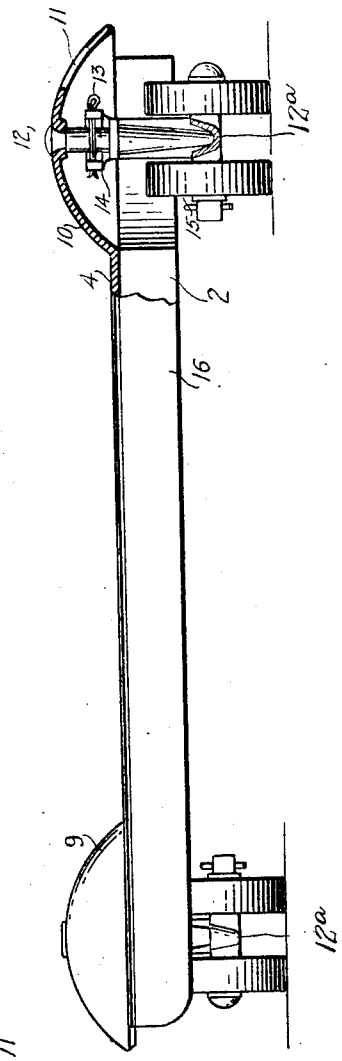

Fig. 2

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CREEPER FOR AUTOMOBILE MECHANICS.

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This invention relates to creepers for automobile mechanics. In this connection the term "creeper" is employed to designate a device upon which a mechanic lies when executing repairs or other work from beneath an automobile, and it is essentially a low wheeled platform consisting of a bed or body of boards or wooden slats usually jointed in order to afford a strong firm surface. Some of the beds are of metal. In the design and construction of the creepers heretofore made with which this applicant is acquainted, the beds are built on cleats or a sub-structure of framework making the total distance from the floor to the top surface of the bed two and one-half to four inches. Almost always standard hardware trade casters are used. The standard casters are commonly one wheel mounted within a yoke like the front wheel of a bicycle. These are found to clog quickly and to start the wheels to dragging or clogging on the floor. This makes the creeper unsatisfactory because of its immobility, and the wheels wear out soon in service. Many of the standard types of two wheel casters are also mounted within a twin yoke and have the same characteristics and objections as the single wheel type.

It is the object of this invention to produce a creeper the bed or body of which is held upon end irons of special construction and arrangement, provided with casters which may be removed and replaced by the removal of a cotter pin only, whereby it is believed a creeper is made unusually strong, and capable of being moved easily in any direction by a mechanic on his back beneath a machine by pushing with hand or foot on the floor, and which cannot readily be broken or rendered unserviceable in ordinary use.

The preferred construction of this invention is illustrated in the accompanying drawings, forming a part of this application, and wherein Fig. 1 represents a top plan view of all parts assembled, and Fig. 2 is an end view, on a somewhat larger scale of drawing, and partly in section to show the construction of the extremity of the end iron and the arrangement of the caster adjacent thereto.

Throughout the description and drawings the same numerals are used to refer to the same parts.

Considering the drawings, the bed or body of this invention may be composed of the wooden boards 1 and 2 held in position together by the dowel pins such as the pin 3. The ends of the boards are supported and secured by means of end irons referred to generally by the numeral 4. The end irons are in practice made of stiff metal plate by stamping. The form of the plate is shown in Fig. 1, and comprises a relatively narrow middle portion 5 and relatively wide end portions 6. The boards 1 and 2 are secured to the end irons by any suitable number of bolts 7. In order to reduce weight, each end iron may have an oblong portion cut away, such a cut-away portion leaving an opening 8 in the middle of the end iron. It will be understood that this invention is not confined to any thickness or length, or materials of the bed or body or with respect to the end irons. The term end irons is used merely for the purposes of this description and some other name may be selected to identify them in advertising literature or the like.

At the wide end portions 6, each end iron is provided with raised hollow or cupped portions 9 and 10, which are substantially covers or housings for the casters. Each of such hollow raised portions may have an opening 11 through which the caster can be reached for oiling or for other purposes mentioned below. Each raised portion has secured centrally thereto by peening, welding or riveting, a vertical pivot pin 12. The head of the pin 12 may be attached to the cup 10 in any common way by which a firm, strong connection is attained holding those parts permanently together. The upper portion of the pin 12 is removably held by the cotter pin 13 passed through the projecting ends of the yoke 14 as shown in Fig. 2. The lower end of the pin 12 is conical in form as usually made, and its lower end engages a seat 12^a formed in the lower portion of the yoke 14 between the wheels 15. It will be now understood that by the removal of the cotter pin 13, the yoke 14 carrying the wheels 15 may be removed. It is necessary only to remove the cotter pin, and if need be that may be done by a suitable tool introduced through the opening 11. The cotter pin 13 serves to retain the upper part of the pivot pin 12 in the yoke 14. The cotter pin sustains no weight, as the head of pin 12 is welded in and practically forms an integral part of the cup 10. It will be now understood that the construction of the hollow raised covers 9 and 10 permit the use of a caster of good size, and yet do not cause the

bed to be supported at too great a distance above the floor. It is desirable to keep the location of the bed or body as low as may be while retaining perfect freedom of movement of the whole creeper.

An important feature of the end irons constructed in accordance with this invention is the flange 16, formed by turning down the plate of each iron on the outer side. In assembling the parts, the outer end corners of the boards 1 and 2 are circularly recessed to admit the raised portions 9 and 10 as illustrated in Fig. 1.

The operation of this invention is believed to be obvious from the drawings and the foregoing explanation. A mechanic may lie upon the bed or body, and as the casters turn in any direction he may move himself to any point beneath a machine requiring attention.

What I claim is:—

1. The combination in a creeper of the character described, of a bed provided with end irons having cupped portions, each cupped portion having a pivot pin therein with its upper end rigidly attached to the said cup, a caster comprising spaced wheels and having an upward extension rising between the wheels and provided at the top with a yoke, the said pivot pin passing through the said yoke, a cotter pin arranged to retain the pin removably in the yoke, and the said caster having a seat engaging the lower end of the pivot pin whereby the caster may turn with respect to the pin.

2. The combination in a creeper of the character described, of a bed, the said bed having inverted cupped members attached thereto and spaced apart, each cupped member having a pivot pin therein with its upper end rigidly attached to the said member, a caster having an upward extension provided at the top with a yoke, the said pivot pin passing through the said yoke, a cotter pin engaging the yoke and arranged to retain the pin removably in the yoke, and the said caster having a seat engaging the lower end of the pivot pin whereby the caster may turn with respect to the pin.

In testimony whereof I affix my signature.

CHARLES M. MOHLER.