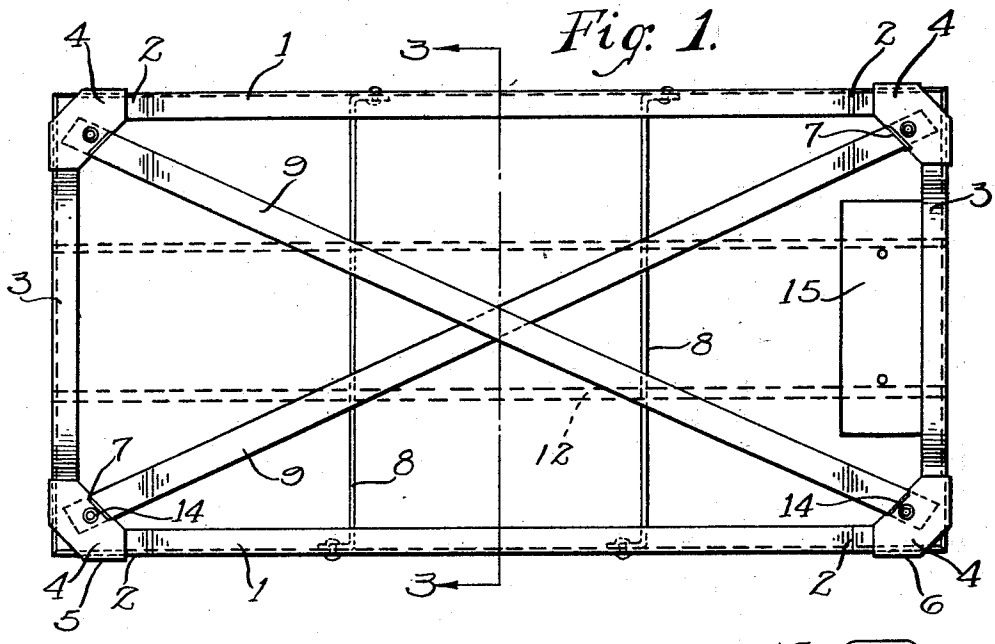
April 5 1932. B. M. STANNARD 1,853,007

GARAGE CREEPER

Filed June 5, 1929

Fig. 1.



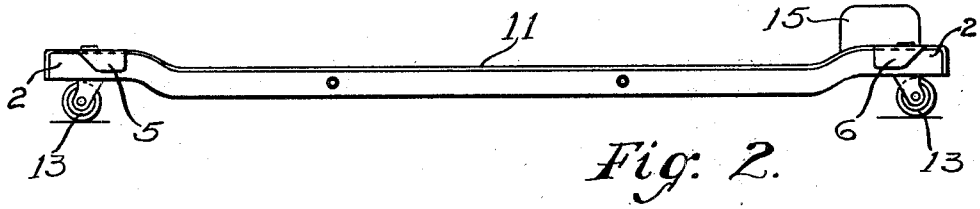


Fig. 2.

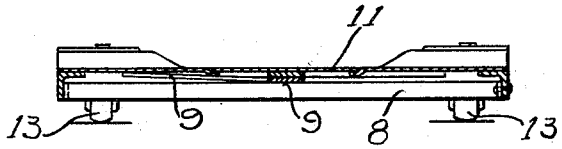


Fig. 3.

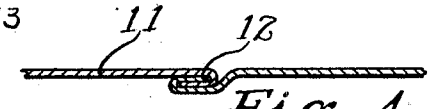


Fig. 4.

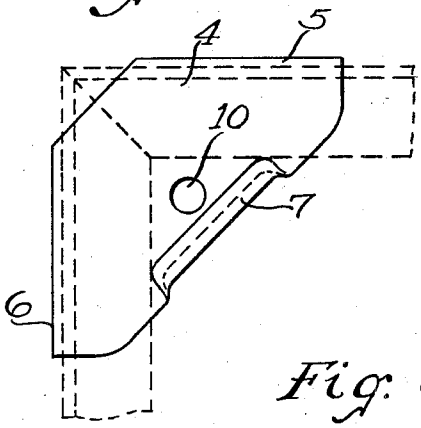


Fig. 5.

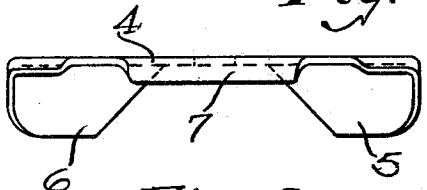


Fig. 6.

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UNITED STATES PATENT OFFICE

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GARAGE CREEPER

Application filed June 5, 1929. Serial No. 368,557.

This invention relates to portable creeper or truck-like vehicle means that is more particularly intended for use in connection with servicing automobiles or other motor driven vehicles in which a service man is likely to be called upon to crawl underneath the chassis for inspection or repair purposes. To this end, my all-metal creeper comprises a relatively flat and well braced latticed frame structure affording separately raised corner regions adapted to compactly mount suitable castors thereunder within the confines of the rectangular body carrying platform.

This invention seeks to provide for a reenforced sturdy device of this general character that shall prove amply strong and durable when subjected to hard garage usage. Said improvements further consist in novel structural features and in the assembled relation of the component parts thereof, all of which will hereinafter be set forth in detail.

Reference is had to the accompanying one sheet of drawings that are illustrative of a specific embodiment of my invention, in which like characters of reference indicate like parts, and in which:

Fig. 1 is a top view or plan of my creeper assembly embodying my improvements except that the web-like cover plate is shown dotted to better disclose the underlying frame structure, while Fig. 2 represents an elevational side view thereof including said cover plate.

Fig. 3 shows a sectional view as taken along the line 3—3 of Fig. 1 and indicates the preferred manner of interlocking the seams of a plurality of cover strips as disposed lengthwise of the creeper; Fig. 4 is an enlargement of one such seam joint.

Figs. 5 and 6 respectively detail top and end views of a corner bracket member that is used in my creeper assembly.

Referring first to Figs. 1 and 2, my creeper frame is usually given a rectangular plan shape and preferably comprises a pair of spaced metal side bars of angle profile such as 1, which are shown medially depressed for a portion of their respective span lengths and each made to terminate in raised offsets or end extensions such as 2. The complementary opposite pairs of extensions are respectively interconnected by separate cross angle bars also of the medially depressed or underslung type such as 3 and each corner region of the abutting frame members may be secured together by means of a sheet metal corner reenforcing bracket. As disclosed in Fig. 5, said bracket comprises a seated top plate 4 having complementary depending flanges 5 and 6 disposed in right angular relation adapted to have adjacent mitered frame ends adjoined thereto by rivets, spot welding or the like to constitute a unitary hollow frame work having each of the corner regions individually raised above the level of the body platform.

Said top plate 4 is further perforated at 10 and also provided with an obliquely struck-up bracket lip 7 of which the respective ends are intended to cooperatively thrust against the innermost edges of adjacent bars in order to center and otherwise facilitate assembly of said frame members. One leg of the interconnected angle shaped frame bars is preferably disposed to face against the corner plates 4 as shown in Fig. 1 while the other leg is set in an outwardly depending relation thereto as indicated in Fig. 2.

Said longitudinally disposed side bars are preferably cross-braced by one or more transverse struts such as 8 which may be set edgewise with the ends thereof turned over to form attaching flanges, respectively secured to a depending angle leg of the oppositely disposed side bars. As an additional support, there are provided brace straps 9 which are shown obliquely disposed from corner to corner of said frame with the respective strap ends extended underneath the inturned bar legs as shown by dotted outline in Fig. 1. The respective strap ends may be secured to the bracket plates but are preferably bolted to the aperture 10 thereof. If desired, either the struts or said straps may also be given a channel or angular profile, and then tied together at their crossing points to provide for an amply stiffened underslung structure.

Overlying the described lattice work and comprised within the confines of the inturned frame members, is a body contacting web-

plate or mat 11. This may either be fashioned in unitary or sectional sheet formation with the marginal edges thereof tucked underneath the oppositely disposed side and cross bars to give said mat a neat trim. The plate margins are preferably attached to said circumscribing bars and may be further adjoined to the center region of the described understructure by rivets or spot welding means.

Said mat 11 may also be fabricated from perforated plate such as nail-head scrap which usually comes in strips that are relatively narrow as compared to the length of the cross bars 3. In such event, it is preferred to resort to an interlocking seam for the contiguous strip edges in the manner indicated in Fig. 3. In the present instance, the use of three such parallel strips are shown applied longitudinally of my frame; the abutting seam edges are each inturned to interlock as detailed at 12 in Fig. 4 and this joint is kept in flush alignment with the uppermost web face.

Each of the aforesaid bracket apertures 10 are further utilized to mount therethrough the threaded shank of a swivel castor, preferably of the ball bearing type designated as 13; the uppermost extremity of each such shank may be provided with a nut 14 which at the same time serves to secure in place the previously described brace straps 9 which as stated are intended to interlock with the inturned bar legs.

As a further refinement, the completed creeper may be provided with an adjustable padded head rest or cushion 15. As will be understood, the common procedure in operating with my device, is for the user to lie flat on his back and in such position creepingly roll himself underneath the chassis to perform work thereon. My offset side and cross bars permit of using a relatively large roller without correspondingly raising the plane of the underslung body mat or platform; the side bar span is thereby kept in close adjacency with the floor level to limit extreme flexure in case a heavy truck load or the like should accidentally be run thereover, as occasionally does happen in garage work. The transverse struts also serve to prevent the side bars from being drawn inwardly under extremely heavy loading.

It will be observed that my heavy duty creeper is capable of withstanding rough usage; also that the lattice work reenforcement supporting and vertically bracing the web plate, is designed to obviate any undue localized flexing of the mat under body load and to prevent permanent sagging thereof under normal operating conditions. The overall height of my device is kept at a minimum in order to properly serve modern low slung cars and still allow of getting thereunder without need of jacking up its chassis to any considerable extent; in addition, substantially made castors are securely attached to the individually raised frame corners, thus imparting long life to this rollable garage accessory.

It is to be understood that the described creeper also finds application to other than automotive repair purposes, and that various changes in structural details may be resorted to in likewise carrying out my illustrative creeper embodiment, all without departing from the spirit and scope of my invention heretofore described and more particularly pointed out in the appended claims.

Claims:

1. A creeper frame comprising a pair of spaced underslung side-bars terminating in raised offset extensions and having cross bars bridging the corresponding bar extensions, a reenforcing bracket for each corner region of said frame and which bracket comprises a flanged top plate seated upon and in overlapping relation to adjoining bars, a strut disposed transversely of said side bars and intermediate the cross bars, a brace strap extending between and secured to opposite corner brackets, castor means associated with the frame corner regions, and a web plate supported upon the top of said frame.

2. A creeper frame comprising a pair of spaced underslung side-bars each terminating in offset raised extensions and which corresponding bar extensions are respectively bridged by a cross-bar that is likewise underslung, a reenforcing bracket for each raised corner region of said frame, each such bracket being provided with a seated top plate having complementary depending flanges respectively adapted to outwardly embrace abutting end portions of said side and cross bars and which bracket is further provided with downturned lip means serving to spread apart said abutting bar portions against the aforesaid flanges, and means clamping each such bracket to its respective frame corner region.

3. A creeper frame comprising a pair of spaced angle shaped side-bars each having one leg thereof inturned and the respective corresponding end portions of which bars are each transversely bridged in abutting relation by an angle shaped cross-bar having one of its legs similarly inturned, a reenforcing bracket for each corner region of said frame including an apertured top plate and flanges seated to overlappingly embrace adjoining bar ends, strap means associated with one of said brackets of which strap one end portion is adapted to underlie an inturned bar leg, a web plate, and castor means provided with a shank adapted to extend through the plate aperture of the last named bracket and the adjacent strap end cooperating therewith.

4. A portable creeper comprising a pair

of spaced side-bars each terminating in offset end extensions that are respectively bridged by cross bars to constitute a frame work having raised corner regions, an apertured reenforcing bracket seated upon each such corner region, bracing means interconnecting certain of said bars, a web plate supported upon said frame, and castor means disposed underneath each of the raised corner regions of said frame, each such castor being provided with a shank extending upwardly through the aperture of its adjacent bracket and serving to clamp an adjoining bar leg thereto.

In testimony whereof, I have herewith set my hand this 4th day of June, 1929.

BRUCE M. STANNARD.