

Feb. 14, 1950

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2,497,565

GREASE MAT FOR HYDRAULIC HOISTS

Filed Aug. 30, 1946

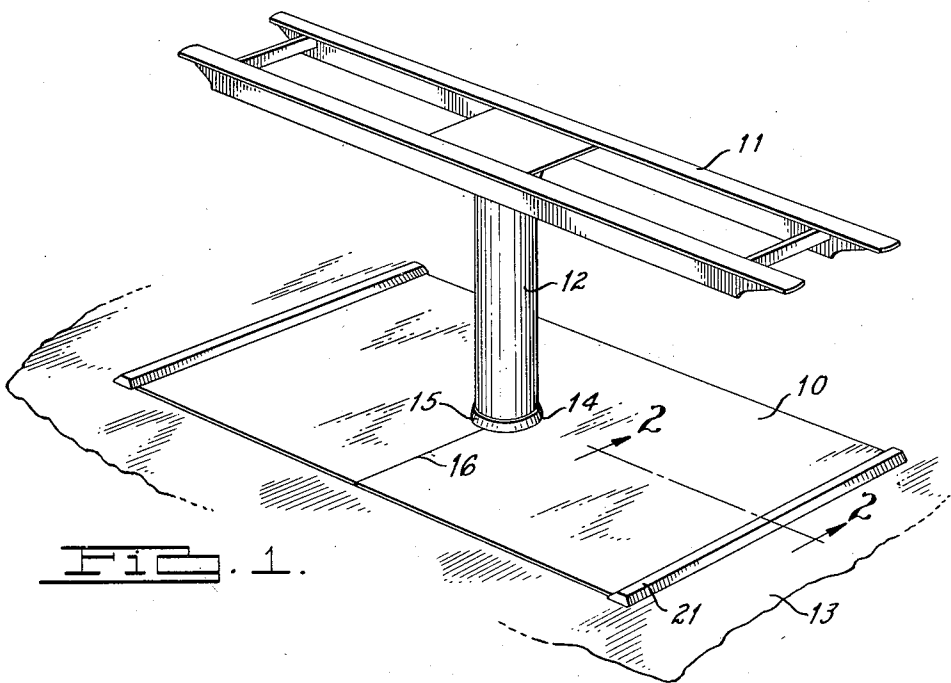


FIG. 1.

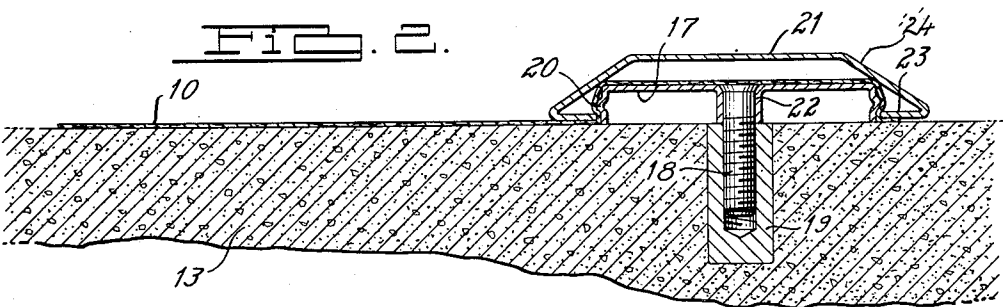


FIG. 2.

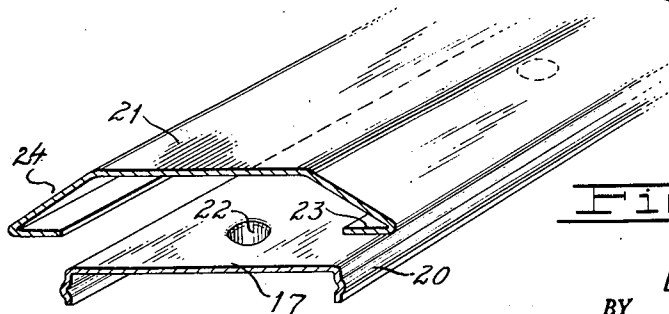


FIG. 3.

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2,497,565

GREASE MAT FOR HYDRAULIC HOISTS

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Application August 30, 1946, Serial No. 694,039

4 Claims. (Cl. 254-1)

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The grease mat was devised by me for use in automobile repair shops, gasoline stations, and other places employing hydraulic hoists of the type that include a rectangular platform or two parallel runners made of channel shaped members, said platform or said runners being mounted on a vertical column or shaft. The latter is slidably disposed in a vertical cylinder sunk in the ground. The top of the cylinder is flush with, or rises slightly above, a cement floor in which the cylinder is ordinarily located.

The runners, or the platforms as the case may be, serve to support an auto vehicle in an elevated position making it easier to inspect it, repair it or to grease its underparts. It is in the course of such repairs or greasing that quantities of oil and grease drop to the floor directly beneath the runners, making the surface of the floor slippery and dangerous for mechanics and other pedestrians. Cleaning the floor is a tedious job, requiring time, also materials like for instance, grease solvents. The purpose of my invention is to eliminate the above said danger of having to work on slippery floors, and to obviate the task of cleaning the floor. I am accomplishing this by the simple expedient of providing a replaceable mat to cover the floor beneath the raised platform or the runners of the hoist. The mat is made of cheap and plentiful material such as pliable paper, fiber, textile or some other suitable substance, the preferred material being the water and grease resistant paper of tough structure. After having been used for a length of time, the paper, when covered with grease to the point when it becomes slippery, may be easily removed and replaced by a new one.

I shall now describe my improvement with respect to the accompanying drawings in which,

Fig. 1 is a perspective view of a hoist including a shaft and a pair of runners thereon, the view also disclosing, in perspective, a mat of my invention, in place on the floor around the shaft;

Fig. 2 is an enlarged sectional view on line 2-2 Fig. 1, showing clamping means to hold the mat in place;

Fig. 3 is an enlarged perspective view, partly in section of clamping means in their disengaged position;

Similar numerals refer to similar parts throughout the several views.

The mat 10 is rectangular in shape and is long enough to approximately equal the length of the runways 11 mounted on a shaft 12. The shaft, as was indicated in the opening paragraph of this specification, is slidably disposed in a

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vertical cylinder, the upper end of which is embedded in the cement floor 13. At its center, the mat is provided with a circular aperture 14, large enough to fit around flange 15 of said cylinder. As any reference to the cylinder is only incidental, said cylinder with the exception of flange 15, is not shown here.

From its central opening the mat is cut laterally as shown by numeral 16 to the outer edge thereof. This is done in order that the central portion of the mat may be placed around the shaft. At each end the mat is held in place by a clamp consisting of an inverted channel shaped member 17, affixed to the top surface of the cement floor 13 by means of screws 18. The screws 18. The screws are threaded through holes 22 in said members 17 into receiving sockets 19, embedded in the floor. Each side of said member 17 is provided with a bead 20 as shown in Fig. 2. Fitting over said member 17 is a longitudinal cover 21 having downwardly sloping sides 24, each of them turning upon itself inwardly to form grippers 23, to abut the respective side of member 17 below the bead 20.

To hold the mat in place, the edge portion of the mat at each end is laid over said member 17, whereupon cover 21 is pressed down upon said end portion of the mat and said member 17, till the resilient grippers 23 of the cap fall in place below the respective beads.

When it is desired to remove the mat, the cover may be easily pried loose from the stationary member 17, permitting the mat to be lifted from the floor and disposed of.

It will be understood that the inventive concept underlying the improvement described by me, does not lie in the mat itself, or the clamping means by themselves, but in a combination of the mat with the flooring and the shaft of a hoist as described by me. What I therefore wish to claim is as follows:

1. In combination with the shaft of a hoist for vehicles, a rectangular, disposable mat, having a central aperture to fit around the shaft, and means along the marginal portions of the mat to hold it in place on the floor level of the hoist.

2. In combination with the shaft of a hydraulic hoist for vehicles adapted to rise vertically from the floor, a disposable water and grease resistant mat on said floor with a central aperture to fit around said shaft, and clamping means at each end of the mat to affix it to said floor.

3. In combination with a hydraulic hoist having shaft means for raising vehicles above the floor level, a water resistant mat, made of flexible,

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easily disposable material, the mat fitting around said shaft means, and disengageable clamp means to affix the mat to the floor in its spread out position under the respective vehicle on the hoist.

4. In combination with a hydraulic hoist having a vertical shaft and platform means to support a vehicle to be raised above the floor level of the hoist, a flexible water repellent mat having an aperture to fit around the shaft and a two part clamp at each end of the mat, the clamp including a stationary member affixed to the floor, and a removable cap to clamp the marginal portion of the mat to the stationary member.

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