

Aug. 22, 1933.

L. H. BEERS

1,923,657

MOORING DEVICE

Filed Feb. 7, 1931

Fig. 1.

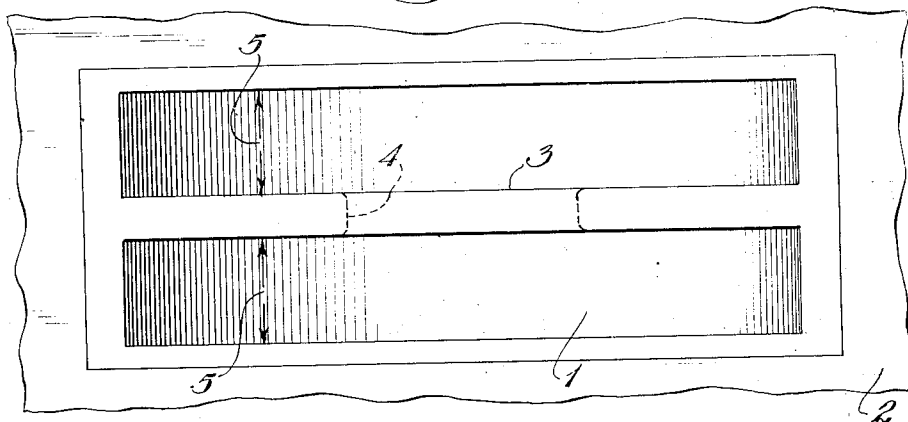


Fig. 2.

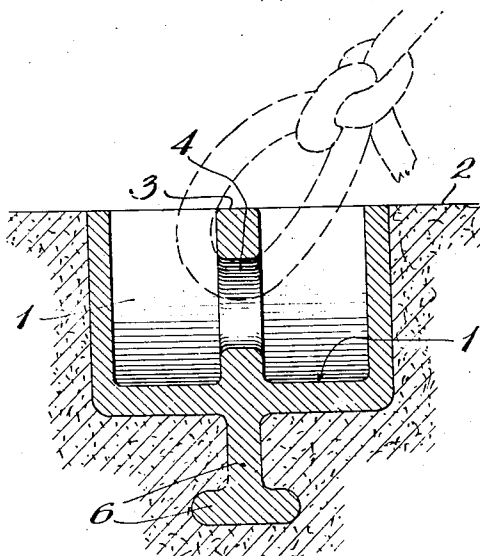
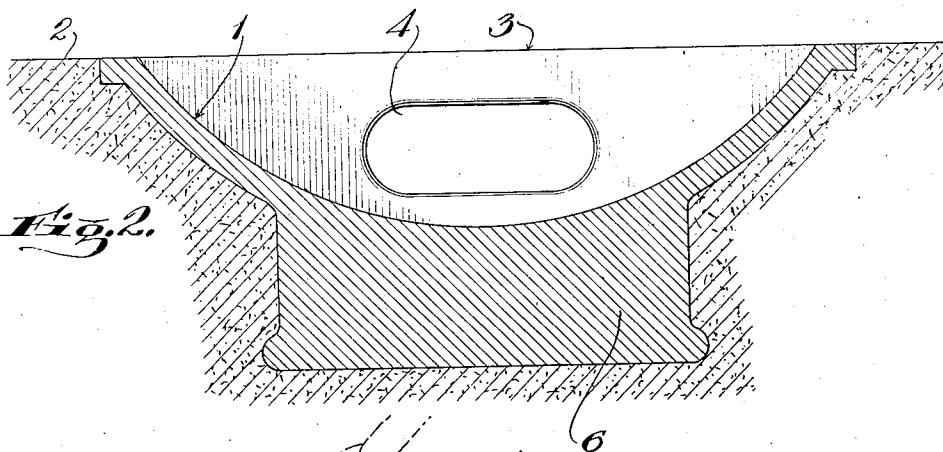


Fig. 3.

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UNITED STATES PATENT OFFICE

1,923,657

MOORING DEVICE

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Application February 7, 1931. Serial No. 514,081

8 Claims. (Cl. 189—90)

The invention is a new article of manufacture to be incorporated in paved surfaces such as the parking platforms on aviation fields and is adapted to provide a secure anchorage to which objects such as airplanes can be readily secured without involving any upwardly projecting part or any objectionable interruption to the pavement surface likely to obstruct or interfere with its normal use, and more especially the object is to provide such a mooring device which is practical and inexpensive and in which dirt and foreign matter will find no secure lodgment and from which it can be easily removed by a broom or the like.

The accompanying drawing illustrates the form of the invention at present preferred, Figure 1 being a plan view, Figure 2 a longitudinal section, and Figure 3 a central cross section.

The new article is comprised essentially of a shallow metal receptacle of considerably greater length than width or depth, and of which the bottom wall or floor marked 1 slopes upwardly from the deepest point, and in both directions to, and flush with, the rim of the receptacle at the ends thereof. An arcuate curvature with a maximum depth of about two inches is indicated, but any configuration of the floor which slopes smoothly or without pockets from the deepest part to the rim will be satisfactory. The device is to be embedded in a paved surface, as for instance by being cast in a concrete platform indicated at 2, with its rim flush with the surface of such platform, and in this position the ends of the sloping floor 1 are substantially flush with the surface of the concrete. The receptacle contains and shrouds a mooring element which does not project upwardly substantially above the plane of the paved surface and the width of which is such that the space between it and the rim is so narrow as to preclude the entry into it of the heel of a shoe, or of other objects commonly moving over the platform, but yet wide enough to permit convenient access to the element for the purpose of attaching a hook or mooring line to it and about as indicated by the dotted lines in Fig. 3. Preferably the mooring element is constituted of a central longitudinal partition 3, integral with the receptacle proper and provided with an eye 4, through which the mooring line is to be passed. Also it desirably extends from end to end of the receptacle with its top edge or surface flat and at the same level with the rim and therefore substantially flush with the pavement surface. The width of the space or slot 5 at the side of the partition may be

approximately one inch or one and one-eighth inch, which meets the purposes stated in a practical manner and is also sufficient, to admit the bristles of a broom or besom used for sweeping the platform, or any other cleaning implement which, because of the curvature, can be passed through the slot in continuous contact with the whole of the floor thereof from end to end, dislodging and ejecting any sand or dirt, or even collected water, leaving the mooring eye 3 clear for use. Removal of such matter is still further facilitated by making the side walls of the receptacle straight and the partition wall parallel therewith and central therebetween and also vertical, and by locating the bottom edge of the eye somewhat above the floor, as indicated, although these additional features are not indispensable.

The receptacle must be securely fixed in the pavement and for this purpose it is provided with one or more anchor lugs or equivalent horizontal projections adapted to interlock with the concrete cast around the device. Such anchorage is indicated in the present case by the lug 6 formed integral with the mooring element with lateral protuberances on it, but it will be recognized that flanges, cross-rods or any other kind of anchorage can be used in place of such lug and that various departures from the particular shape and dimensions indicated in the drawing are possible within the principle of the invention and the scope of the following claims.

I claim:

1. As an article of manufacture, a mooring device comprising a shallow receptacle adapted to be embedded in a pavement with its rim substantially flush with the surface thereof and containing a mooring element, the top of said element being substantially flush with the pavement and spaced from the side wall of the receptacle by a space so narrow as to avoid interference with the normal use of the pavement and the floor of the receptacle being sloped upwardly in both directions substantially to the pavement surface.
2. As an article of manufacture, a mooring device comprising a receptacle having vertical side walls and adapted to be embedded with the rims of said walls substantially flush with the pavement and containing a central upstanding, longitudinal partition constituting a mooring element, the top of said partition being flush with the top of said rim and spaced from the side walls by spaces so narrow as to avoid interference with the normal use of the pavement and the floor of

the receptacle being sloped longitudinally upwardly in both directions substantially to the plane of the pavement.

3. As an article of manufacture, a mooring device comprising a shallow receptacle adapted to be embedded with its rim substantially flush with the pavement and having a subsurface anchorage member, the floor of said receptacle being sloped upwardly from about the center of the opposite ends where it is substantially flush with the plane of the pavement and said receptacle being shallow and thereby adapted to permit foreign matter therein to be swept up the slope of the floor onto the pavement, and a mooring element contained in said receptacle, the spaces between upright portions of the article being so narrow as to avoid interference with the normal use of the pavement.

4. As an article of manufacture, a mooring device comprising a receptacle of greater length than depth formed to be embedded in a pavement with its rim flush with the surface thereof and containing a mooring element also substantially flush with the pavement surface, the space between said element and rim being narrow enough to avoid interference with the normal use of said pavement and the floor of said receptacle being sloped upwardly to the plane of the pavement.

5. As an article of manufacture, a mooring device comprising a receptacle of greater length than depth or width adapted to be embedded in a pavement with its side rims flush with the surface of the latter, said receptacle containing a mooring element flush with said rim, the space between said element and rim being so narrow as to avoid interference with the normal use of the pavement.

6. As an article of manufacture, a mooring device comprising a receptacle of greater length than depth adapted to be embedded in a pavement with its rim flush with the surface thereof and formed with an integral mooring element therein flush with the pavement, the space between said element and rim being so narrow as to avoid interference with the normal use of the pavement and the floor of the receptacle being sloped longitudinally and substantially flush at its ends with the plane of the pavement.

7. As an article of manufacture, a mooring device comprising a receptacle formed to be cast in a concrete pavement with its rim flush with the surface thereof and containing a mooring element also substantially flush with the pavement surface, and having anchoring means to interlock with the concrete, the space between said element and rim being so narrow as to avoid interference with the normal use of the pavement, and the floor of said receptacle being sloped upwardly in both directions to the plane of the pavement.

8. As an article of manufacture, a mooring device comprising a shallow receptacle adapted to be imbedded in a concrete pavement and having a curved or sloping floor shaped to be swept clear of dirt and containing a mooring element integral with the receptacle and having a downwardly projecting anchorage below said floor imbedded in the concrete, the space between said element and the wall or rim of the receptacle being so narrow as to avoid interference with the normal use of the pavement.

LUCIUS H. BEERS.

CERTIFICATE OF CORRECTION.

Patent No. 1,923,657.

August 22, 1933.

LUCIUS H. BEERS.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, line 9, claim 3, for "of" read "to"; and that the said Letters Patent should be read with this correction, therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 24th day of October, A. D. 1933.

F. M. Hopkins

Acting Commissioner of Patents.

(Seal)