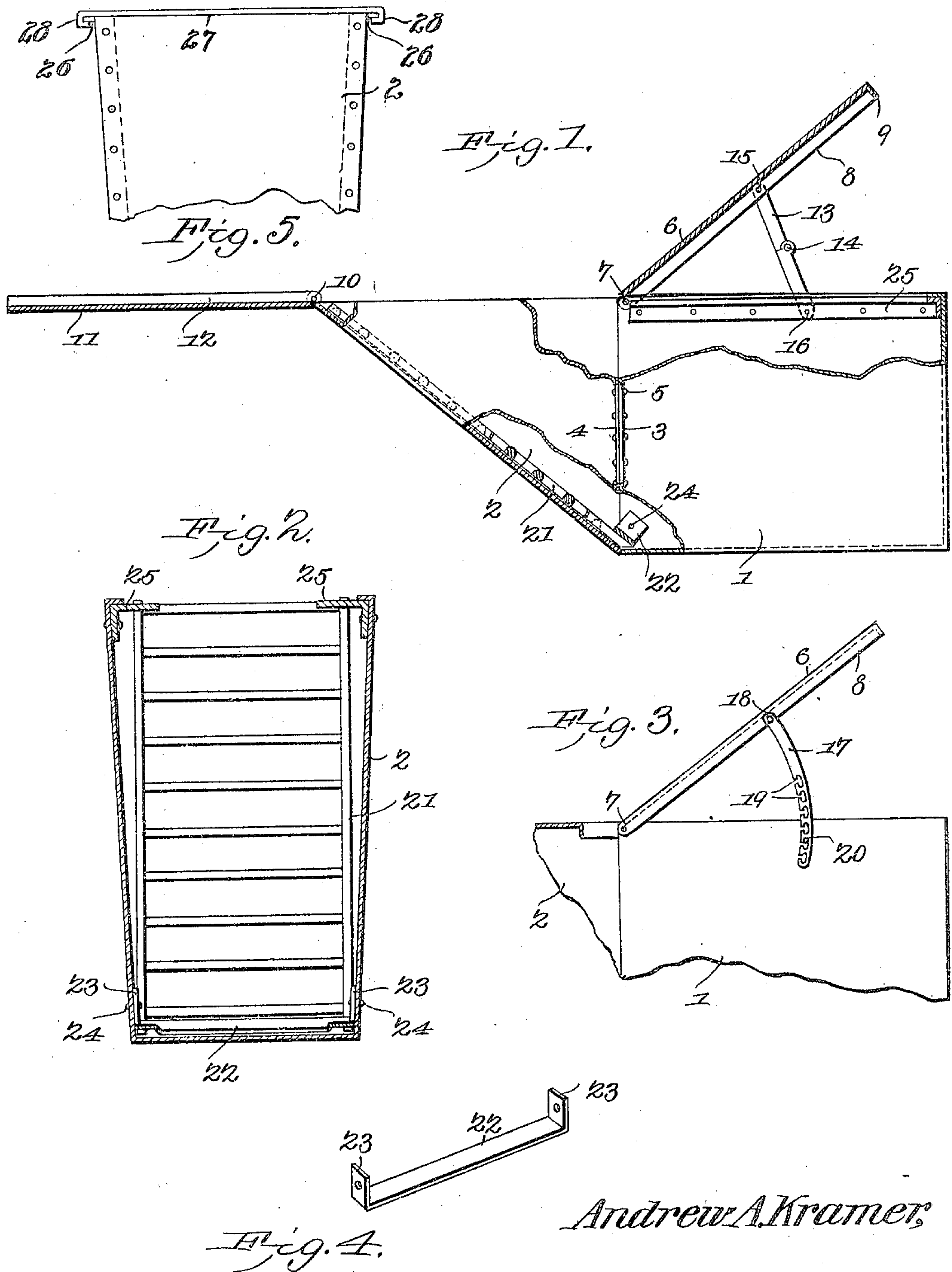


No. 821,809.

PATENTED MAY 29, 1906.

A. A. KRAMER.
DIPPING TANK.

APPLICATION FILED OCT. 2, 1905.



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UNITED STATES PATENT OFFICE.

ANDREW A. KRAMER, OF KANSAS CITY, MISSOURI.

DIPPING-TANK.

No. 821,809.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed October 2, 1905. Serial No. 280,967.

To all whom it may concern:

Be it known that I, ANDREW A. KRAMER, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Dipping-Tank, of which the following is a specification.

This invention relates to dipping-tanks such as are employed in cleansing animals of vermin and the like.

The objects of the present invention are to provide an apparatus of the character stated which shall be portable, comparatively light, and durable, in which novel means is provided whereby an unruly or fractious animal will be forced to enter the tank, in which novel means is provided for permitting the animal to drain before leaving the apparatus, in which novel means is provided for holding the ladder combined with the apparatus, in which novel means is provided for preventing any splashing out of the contents of the tank when an animal plunges therein, and in which all the parts are constructed and combined with a view to thorough efficiency in use and practical elimination of derangement or breakage.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a dipping-tank, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in elevation, partly in section, of a dipping-tank constructed in accordance with the present invention. Fig. 2 is a view in vertical transverse section through the tank. Fig. 3 is a view in elevation, partly in section, of a portion of the tank, showing a modified feature. Fig. 4 is a perspective detail view of a part of the apparatus. Fig. 5 is a view in elevation, showing a slightly-modified form of a portion of the apparatus.

The apparatus embodies a tank 1, which is preferably rectangular in form, with its sides slightly inclined outward, as shown in Fig. 2, and with which is combined a chute or incline 2. The tank and incline are both made of sheet metal and are assembled in such manner as to insure rigidity and strength—in this instance by providing the tank with a flange 3, the incline with a similar flange 4,

and then securing the flanges together by bolts or rivets 5.

The tank has combined with it at or adjacent to its point of juncture with the incline a combined cover or guard 6, which is assembled with the tank by any suitable hinge connection, as by pivot-pins 7, one only of which is shown. The cover or guard 6 is constructed of metal and has downturned marginal flanges 8 and 9, which are designed to fit externally of the sides and end of the tank.

The incline has assembled with it by any suitable hinge connection, as pivot-pins 10, a combined cover and drain-board 11, which has marginal flanges 12 to fit on the outer sides of the incline when closed, the flanges serving to prevent escape of liquid laterally from the board.

As stated, one of the objects of the invention is to cause the positive entrance of the animal to the tank, as under some conditions a fractious animal might jump to one side, and thus escape the bath. To accomplish this, and as shown in Fig. 1, there is a pair of keepers 13, each consisting of two members connected by a rule-joint 14, the terminals of the members being pivotally connected at 15 and 16 to the guard and tank, respectively, and are designed to fold down exteriorly of the tank, thus to be out of the way when the guard is closed. It will be seen from this arrangement that should an animal attempt to jump over the tank he will positively be checked in this movement and will be precipitated downward, thereby causing him to enter the bath.

Instead of employing the keepers as shown in Fig. 1, that shown in Fig. 3 may be employed, which consists of a pair of curved arms 17, (one only being shown,) which are pivotally connected at 18 to the flanges of the guard. The concaved side of the keepers are provided with a plurality of approximately keyhole-shaped notches 19, which are adapted to engage studs or pins 20, that project outward from the sides of the tank, the object for having the notches shaped as shown being to prevent any disconnection of the arms from the pins should the animal strike the guard in its efforts to escape the bath. These keepers also are disposed exteriorly of the tank when the guard is closed, thus to be out of the way.

As is usual, there is combined with the incline or chute a ladder 21, and in order to prevent this from floating, which frequently

occurs in structures of this kind, there is an anchor 22 employed, which, as shown in Fig. 4, consists of a strip of metal having up-turned orificed terminals 23, through which
5 pass bolts or rivets 24 to secure it to the tank.

As shown in Fig. 1, the anchor is disposed at an angle corresponding to the pitch of the bottom of the incline, so that no obstruction will be presented which will be liable to
10 catch in the feet of the animal.

With apparatus of this character as generally employed more or less of the liquid contained in the tank is splashed therefrom when the animal is plunged therein, and to
15 obviate this there is a pair of splash-guards 25 employed, which are riveted or otherwise secured to the upper edges of the tank. These guards are approximately L-shaped in cross-section, and the horizontal members thereof
20 project inward a sufficient distance to catch any liquid splashed upward and return it to the tank.

In use the parts are disposed as shown in Fig. 1, the drain-board being of course supported against downward movement. The
25 animals are then driven into the tank, which will contain a suitable detergent or vermicide, and after proper treatment are allowed to pass up the incline and onto the drain-board 11, where the bulk of the liquid will be
30 shed and passed back to the tank.

When the apparatus is not in use, the drain-board and guard will be folded down over the respective parts with which they co-
35 act and are thus shielded from liability of breakage and will also be caused to occupy less space.

Instead of having the drain-board pivotally connected with the incline, as shown in
40 Fig. 1, it may have a sliding connection therewith, as shown in Fig. 5, which is effected by providing the incline with lateral flanges 26 and by forming the drain-board 27 with in-turned guides 28 to engage the flanges.

45 Having thus described the invention, what is claimed is—

1. The combination with a dipping-tank,

of a combined cover and guard pivotally connected therewith, and keepers for maintain-
ing the guard in raised position. 50

2. The combination with a dipping-tank embodying a chute, of a combined cover and drain-board movable to cover or uncover the chute.

3. The combination with a dipping-tank 55 embodying a chute, of a combined cover and drain-board pivotally connected with the chute.

4. The combination with a dipping-tank, of a combined cover and guard pivotally con- 60 nected therewith, keepers for maintaining the guard in raised position, and splash-guards arranged below the cover.

5. The combination with a dipping-tank, of a combined cover and guard pivotally con- 65 nected therewith, keepers for maintaining the guard in raised position, and inward-projecting splash-guards carried by the upper portion of the tank.

6. An apparatus of the class described em- 70 bodying an approximately rectangular tank, an incline or chute connected therewith, a combined cover or guard pivotally connected to the tank and having a keeper assembled therewith, and a combined cover and drain- 75 board pivotally connected with the chute.

7. An apparatus of the class described em- bodying an approximately rectangular tank, an incline or chute connected therewith, a combined cover or guard pivotally connected 80 to the tank and having a keeper assembled therewith, splash-guards carried by the tank below the cover, a ladder disposed upon the chute, means for holding the ladder in posi- 85 tion, and a combined cover and drain-board pivotally connected with the chute.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW A. KRAMER.

Witnesses:

A. G. SHIERS,
LORANA TRASK.