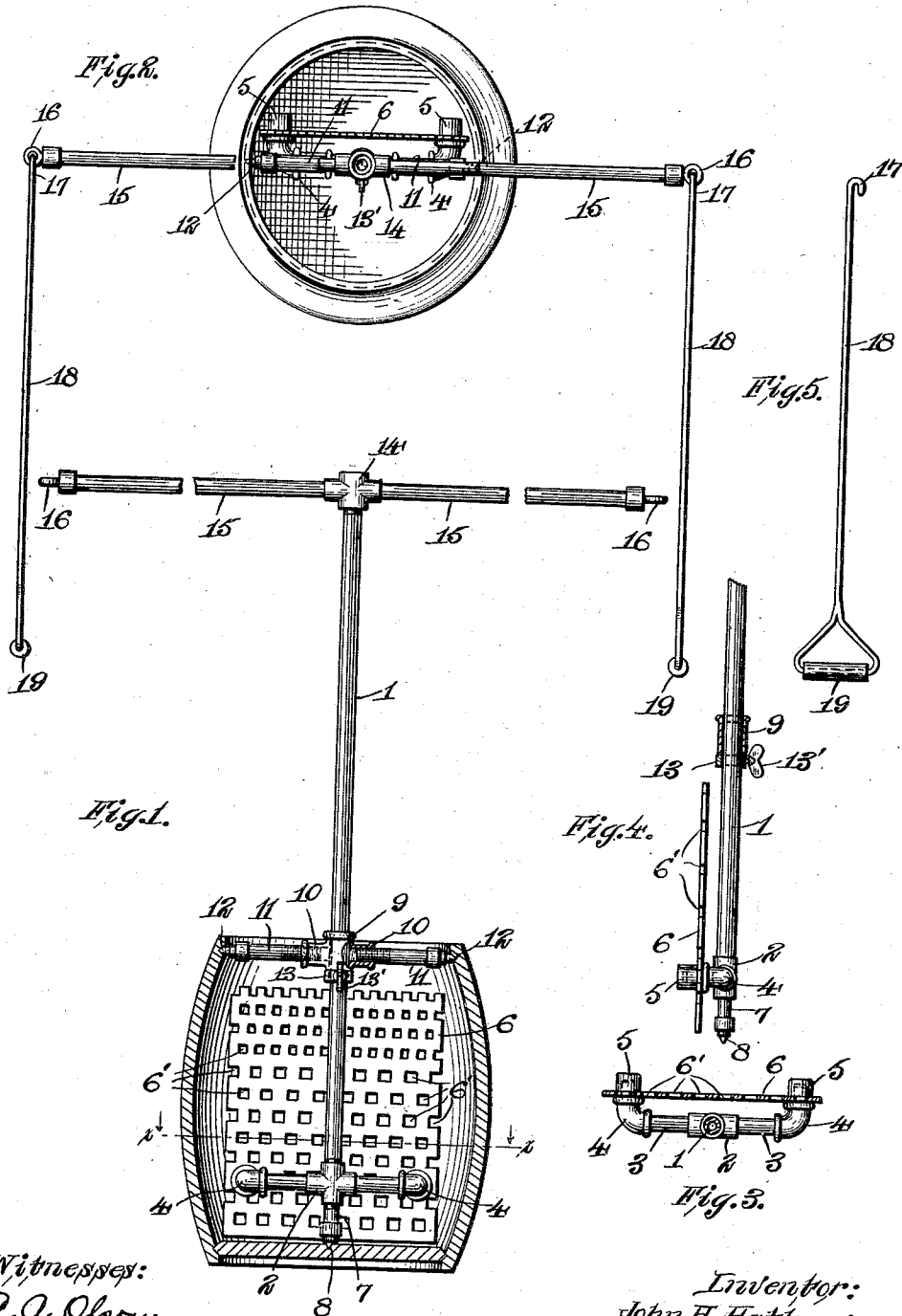


J. H. HATHAWAY.
AGITATING DEVICE.
APPLICATION FILED NOV. 1, 1909.

995,001.

Patented June 13, 1911.



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UNITED STATES PATENT OFFICE.

JOHN H. HATHAWAY, OF MAYWOOD, ILLINOIS.

AGITATING DEVICE.

995,001.

Specification of Letters Patent. Patented June 13, 1911.

Application filed November 1, 1909. Serial No. 525,823.

To all whom it may concern:

Be it known that I, JOHN H. HATHAWAY, a citizen of the United States, residing at Maywood, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Agitating Devices, of which the following is a specification.

My invention relates to agitating devices and more specifically to that class thereof known as lead breakers.

The object of my invention is the provision of a device of the character mentioned which will be so designed as to adapt the same to be readily arranged in a paint-keg, upon the removal of one of the heads of the latter, in such a manner as to permit of the ready manual oscillation thereof therein, in effecting the thorough breaking of the lead or oil contained in the keg.

A further object is the provision of an agitating device as mentioned which will be of an adjustable nature adapting the same for arrangement in kegs of various dimensions; and further a device which will be effectual in operation, and which will be of strong, durable and economical construction.

Other objects will appear hereinafter.

With these objects in view my invention consists in an agitating device characterized as above mentioned and in certain details of construction and arrangement of parts all as will be hereinafter fully described and particularly pointed out in the appended claims.

My invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a partially sectional front elevation of my device showing the same operatively arranged in a paint keg, the latter being shown in section, Fig. 2 is a top plan view thereof, Fig. 3 is a horizontal section of the device taken on line $x-x$ of Fig. 1, Fig. 4 is a partially sectional side elevation of the device, and Fig. 5 is a plan view of one of the operating handles embodied in the device.

Referring now to the drawings, 1 indicates an elongated cylindrical bar carrying

radially extending arms 3 secured to its lower end by means of coupling 2. Provided at the outer extremities of the arms 3 are elbows 4 to the rearwardly projecting extremities of which is rigidly secured, preferably by screw caps 5 threaded upon studs projecting from said extremities of said elbows, a preferably rectangular perforated plate or dasher 6 disposed in parallelism with the bar 1. As seen the perforations provided in said plate are polygonal, preferably rectangular in form, those arranged close to the upper extremity of the latter being smaller than the others for reasons which will be hereinafter described. Said plate may be of any dimensions or form desired, but it is preferably of a length and width such as to permit of its being snugly accommodated in a standard one-hundred pound lead keg.

Arranged at the lower extremity of the bar 1 is an axially alining extension 7 at the lower extremity of which is provided a point 8. As clearly shown in Fig. 1, said point projects slightly below the lower extremity of the dasher 6, hence upon the arrangement of the device in a paint-keg, is adapted to be forced into the lower head of the latter to form a journal for the bar 1. Freely slidable upon the bar 1 is a bearing member 9 in the laterally projecting coaxially disposed portions 10 of which are loosely threaded the inner ends of laterally projecting arms 11. Provided at the outer extremity of each of the arms 11 is a point 12. Said arms and supporting portions 10 therefor are of such lengths and are so proportioned that upon arrangement of the device in a keg, the former may be retracted to such an extent as to permit of the passage of the points 12 beyond the mouth edge of the keg, and after such passage of said points below said edge, said arms may be so rotated in said supporting portions as to force said points outwardly into engagement with the groove originally provided at the mouth of the keg for the reception of the periphery of the removed head of the latter. Longitudinally adjustable upon the bar 1 is a collar 13 adapted to be locked in posi-

tion thereon by a set screw 13' threaded into said collar, the inner extremity thereof being adapted to engage the outer surface of said bar. Said collar is arranged upon the latter below the member 9, hence when resting in engagement with the member 9, is evidently adapted to serve as a means of preventing upward movement of the bar in said member 9.

Secured, as by a detachable coupling 14, to the upper extremity of the bar 1, are laterally projecting alining arms 15 of considerable length at the outer extremity of each of which is provided an eye 16. Having their hooked extremity 17 detachably secured to the eyes 16, are operating handles 18 at the opposite extremities of which are provided suitable grips 19. Said handles or links, when the device is being operated, are elevated to substantially horizontal position, whereupon by holding the respective grips 19 one in each of his hands, the operator by an alternating horizontally reciprocating movement of his arms, may readily oscillate the bar 1 and hence the dasher 6.

The operation of the device is as follows: Upon the upper head of the keg containing the lead to be broken being removed, the lower end of the device is inserted centrally into said keg until the point 8 thereof contacts substantially the center of the bottom head thereof. The bar 1 is then forced downwardly with sufficient force to cause said point to pierce the bottom of the keg, as shown in Fig. 1. The arms 11 are now adjusted to force the points 12 thereof into the before named groove provided at the mouth end of the keg. By means of the collar 13 the bar 1 may now be locked in position against upward movement relative to the keg, such provision evidently being made to prevent disengagement of the point 8 with the bottom of the keg, upon the rotation of the bar 1. Now by means of the arms 15 and handles 18, the bar 1, with the keg bottom and the member 9 as bearing points may be oscillated, and hence the dasher may be readily oscillated in the keg to effect the thorough breaking or mixture of the lead and oil contained therein.

In the operation of the device, the denser mixture of the lead and oil it is evident will remain at the bottom of the keg, the less dense of the mixture remaining at the top, hence the reason for forming the perforations 6' smaller and of greater abundance close to the top of the dasher 6 and larger and farther apart at the lower end thereof. Further by forming said perforations of a polygonal form that is with the number of angles, rather than circular wherein no angles would be formed in the bounding edges of the plate, it has been found that a more efficient breaker or mixer results.

By reason of the vertically slidable and laterally adjustable character of the arms 11, it is evident that the device may be arranged in kegs of various sizes. Through the provision of the arms 15 of a comparatively great length as stated and the handles 18 connected thereto in the manner described, a great leverage results whereby the force required to operate the device is proportionately reduced. The arms 15 because of the detachable connection of the coupling 14 with the bar 1 may be detached from the latter, and the handles 18 as before stated may be detached from said arms, thereby permitting of the device being arranged to occupy a smaller compass, this being of evident advantage in the shipment or storage of the device.

While I have shown what I deem to be the preferable form of my device I do not wish to be limited thereto as there might be various changes made in the details of construction and the arrangement of parts without departing from the spirit of the invention comprehended within the scope of the appended claims. And although I have designed my device with special reference to its arrangement in a paint or lead keg the same may be used in conjunction with any other similar vessel or receptacle to which it is applicable.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A dasher for paint mixers, comprising a flat member provided with openings therein, the said openings being larger at the bottom than at the top, substantially as described.

2. In an agitating device, the combination with a keg having its top head removed, of a shaft coaxially arranged therein supported upon the bottom thereof, a rectangular dasher plate having polygonal openings provided therein, a point provided at the lower end of said shaft piercing said bottom, a bearing loosely mounted upon said shaft, alining laterally projecting arms having their inner ends loosely threaded in said bearing, points provided at the outer ends of said arms engaging the groove previously engaged by the periphery of the head removed from said keg, a collar loose on said shaft having a set screw whereby the same may be locked to said shaft in engagement with the lower end of said bearing, laterally projecting alining arms provided at the upper end of said shaft, and horizontally disposed handle rods having their ends detachably secured to the outer ends of said last named arms, substantially as described.

3. In an agitating device, a shaft, a flat dasher, a pair of horizontal arms projecting from said shaft, horizontally disposed

5 elbows on the ends of said arms, means for securing said dasher to the ends of said elbows, a bearing for said shaft above said dasher, adjustable means for securing said bearing in the upper end of a keg and means for turning said shaft, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN H. HATHAWAY.

Witnesses:

JOSHUA R. H. POTTS,
JANET E. HOGAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
