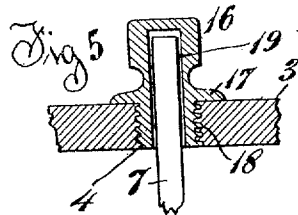
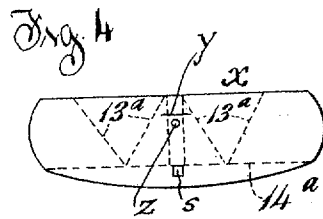
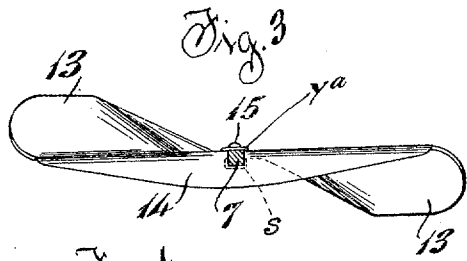
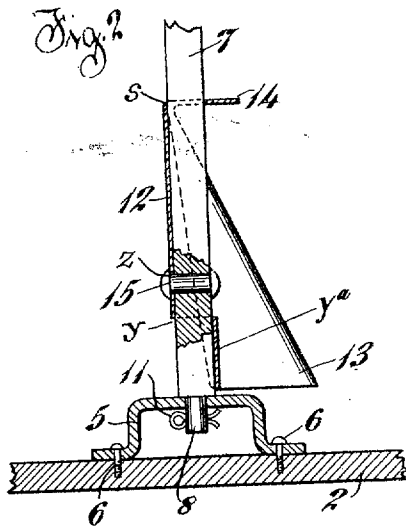
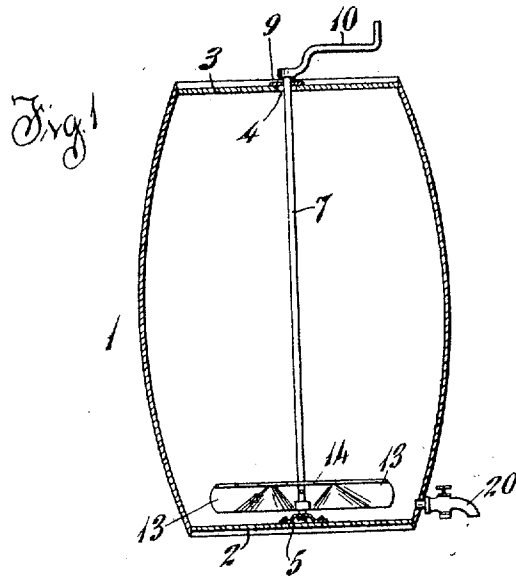


F. B. STOCKMANN.  
 AGITATOR OR STIRRER FOR PAINT BARRELS AND THE LIKE.  
 APPLICATION FILED JUNE 28, 1909.

Patented Oct. 11, 1910.

972,727.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRED B. STOCKMANN, OF CINCINNATI, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO  
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AGITATOR OR STIRRER FOR PAINT-BARRELS AND THE LIKE.

972,727.

Specification of Letters Patent. **Patented Oct. 11, 1910.**

Application filed June 28, 1909. Serial No. 504,707.

*To all whom it may concern:*

Be it known that I, FRED B. STOCKMANN, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Agitators or Stirrers for Paint-Barrels and the Like, of which the following is a specification.

This invention relates to paint mixers, or, more particularly speaking, to the agitating or stirring devices used in barrels, kegs, cans or like receptacles for paint that has been already mixed, or for other liquid compounds that contain heavy matter or sediment that has a tendency to settle to the bottom when at rest.

The object of the invention is to provide a stirring blade or paddle of a single sheet of metal or other suitable material that is not likely to affect or be affected by the contents of the receptacle, such single piece of material being bent and shaped into form with due consideration for both lightness and strength and, also, for use in causing the settlings to readily rise in the liquid for thorough admixture.

In the single sheet of drawings, forming a part of this specification, Figure 1 is a vertical section of a barrel showing my improved agitating or stirring device in operative position therein; Fig. 2, a fragmentary, vertical section, partly in elevation, showing the bottom-head of the barrel (omitting the barrel itself), the lower portion of the upright shaft of the device, the lower bearing for said shaft mounted on said bottom-head and the stirring-blade mounted on said lower portion of the upright shaft, all on a somewhat larger scale than that of the same parts seen in Fig. 1; Fig. 3, a plan view of the stirring-blade that forms the principal feature of my invention herein, such blade being detached from all the other parts of the device excepting the upright shaft, the latter being shown in cross-section; Fig. 4, a plan view, on a reduced scale, showing the blank strip or piece of sheet-metal used in forming my improved stirring-blade, the dotted-lines indicating those on which the blade is bent and shaped into the form seen in said Fig. 3; and Fig. 5, a fragmentary section of the head or top of the barrel showing a safety-plug used in the center thereof for closing the shaft aperture when the

hand-crank has been removed and when the barrel is to be closed and handled.

In these views, 1 indicates the barrel or receptacle for the paint or other solution to be held therein.

2 indicates the bottom-head and 3 the top-head of the barrel, the top-head having a central aperture 4 and the bottom-head having a central step or raised bearing-piece 5, the latter being suitably secured by means of screws or the like 6 on the inner face of the said bottom-head.

7 indicates an upright axial shaft centrally-disposed in the barrel, with its lower reduced end 8 bearing in the central aperture in the raised portion of the bearing 5 and passing upward through the central aperture 4 in the top 3, a centrally-perforated plate 9 being secured concentric to the outer face of the head 3 over the aperture 4, as best seen in Fig. 1. The plate 9 is removably-attached in place by screws or the like and forms a wearing surface for the said aperture 4 in the top of the barrel and so that the upper part of the shaft turns free of said aperture 4.

10 is a hand-crank removably-attached to the upper end of the shaft 7, for driving the latter.

A cotter-pin 11 is placed in the lower reduced end 8 of the shaft to prevent the latter becoming disengaged from the bearing 5 in use. This cotter-pin enables the ready separation of the shaft from the bearing 5 when desired and is readily inserted owing to the opening provided in the raised portion of said bearing. The lower end of the shaft is raised above the inner face of the bottom of the barrel so that there is no undue wear or friction.

The most important feature of my invention herein lies in the construction of the paddle or agitator. This agitator is a horizontal one and is made of a single sheet of metal cut into the form seen in the blank *z*, Fig. 4. This blank is split at *y*, perforated with a small hole at *z*, and, also, perforated with a square hole at *s*, the purposes of which will be now described.

The agitator blade or paddle is composed of the body portion 12 having at its opposite ends the flaring arms or wings 13 and, also, having along its horizontal upper edge an integral flange 14 bent laterally outward horizontally.

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In Fig. 4, it will be seen that the flange 14 is bent on the dotted-line 14<sup>a</sup> and the flared wings 13 are shaped along the oblique dotted-lines 13<sup>a</sup>.

5 The shaft 7 is preferably square in cross-section and passes downwardly through the square aperture *s* in the flanged portion 14 of the blade and thence downward in contact with the body portion 12 of the blade, to and  
10 through an opening or guide-way provided by upsetting or outwardly-turning the metal  $\gamma^a$  in the split portion  $\gamma$  of the blank. The lower edge of the blade is elevated slightly above the raised portion of the bearing 5, as  
15 best seen in Fig. 2, so as to properly clear said raised portion of the bearing in rotating, and a rivet 15 is provided to suitably attach the blade in place on the shaft, and, also, as best seen in said Fig. 2, the said rivet  
20 passing through the perforation *z* of the blank  $\alpha$  after the blank has been duly shaped.

It is important that the blade be made of a single sheet of metal and provided with  
25 the flange 14, together with the integral wings 13, 13, so that its manufacture is simple and economical and so that there are no loose parts to get out of order or become detached and, also, so that such blade can be  
30 readily attached in place by means of a single rivet at the lower end of the shaft and securely held in position free from lateral or torsional movement on the shaft and is adapted to stir and force the sediment or  
35 heavy material from the bottom of the receptacle into solution or thorough circulation with the liquid contents of such receptacle.

The safety-plug, seen in Fig. 5, is another  
40 important feature of the invention herein, for the reason that it is to be used when the hand-crank 10 is removed and the barrel is to be tightly closed for any desired handling thereof. This safety-plug is composed of a  
45 closed head 16 having a flange or base 17 and a lower, extended screw-threaded shank 18, such shank being adapted to be readily turned or screwed into the aperture 4 of the top-head 3 when plate 9 has been  
50 removed, the hollow or elongated cavity 19 of the plug being adapted to receive the upper end of the shaft 7 and to hold the stirring mechanism in proper position. None of the contents of the barrel can escape when this  
55 plug is in place and it is readily removed when it is desired to use the stirring or agitating devices.

An outlet-faucet 20 is provided at the bottom of the barrel for use in withdrawing  
60 the contents at will and is a feature common to paint-mixers.

It is obvious that a number of paddles or blades such as the one shown, can be mounted on the shaft 7 at suitable intervals apart

above the blade already shown in Fig. 1, for  
65 the purpose of expediting the admixture or circulation of the contents, especially when the settlings are of a very heavy nature, such as is paint itself that is mostly concerned  
70 herein. A series of paddles or blades constructed on my plan can be readily attached on the shaft and at comparatively small expense taking into consideration the effective result accomplished on said heavier ingredi-  
75 ents.

I claim:

1. A stirrer or agitator device for paint barrels or the like, the same comprising a single sheet of metal having a flat body portion, made integral flaring wing portions at the opposite ends of such body portion but within the length thereof and a horizontal flange or forwardly-projecting portion along the upper edge of said body portion.

2. A stirrer or agitator device for paint-  
85 barrels or the like, the same comprising a single sheet of metal having a flat body portion, made integral flaring wing portions at the opposite ends of said body portion but within the length thereof, a horizontal flange  
90 extending along the upper edge of said body portion, an outwardly-extended eye-portion centrally made in the lower edge of the body portion, an aperture or guide-way pierced in the center of said upper flanged portion and  
95 means comprising an upright shaft for supporting said blade for rotation within a paint-barrel or the like.

3. A stirring or agitating device for use in paint-mixers or like receptacles, the same  
100 comprising an upright shaft, a raised bearing within the lower or bottom portion of said paint-mixer or like receptacle for receiving the lower end of said shaft, a cotter-pin in the extended end of said shaft below  
105 the raised portion of said bearing, a stirring-blade horizontally-extended at the lower end of said shaft above the said bearing and made of a single sheet of metal with oppositely-flaring wings and a horizontal  
110 flange, a rivet for securing said blade to the shaft and a driving hand-crank removably-attached to the upper end of said shaft.

4. A paint-mixer having therein a vertical shaft and a horizontal blade or paddle, a  
115 top-head having a central aperture for the outwardly-extending portion of said shaft and a hollow safety-plug having a closed head, a flanged base and a screw-threaded lower extended shank portion adapted to  
120 close said aperture and receive the upper end of the shaft when the device is not in use or to be handled in transportation.

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Witnesses:

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