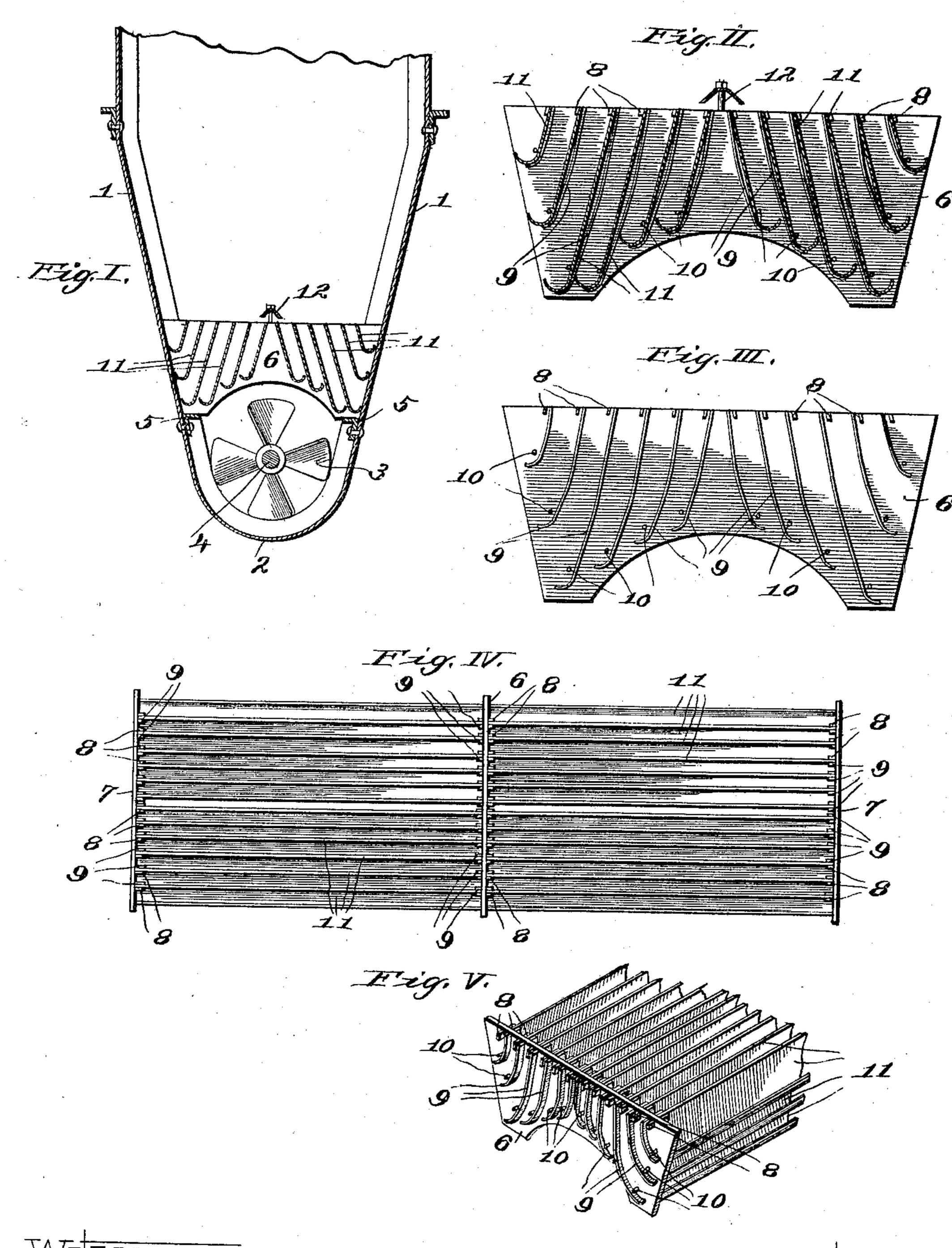
C. A. BROWN. PAINT AGITATOR.

(Application filed Sept. 16, 1898.)

(No Model.)



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Salanberschniett. ESKright Charles A. Brown

By James John

United States Patent Office.

CHARLES A. BROWN, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE MOUND CITY PAINT AND COLOR COMPANY, OF SAME PLACE.

PAINT-AGITATOR.

SPECIFICATION forming part of Letters Patent No. 628,751, dated July 11, 1899.

Application filed September 16, 1898. Serial No. 691,059. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BROWN, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Paint-Agitators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention relates to improvements in devices for agitating paints, and is designed for use in what is known as the "dipping" process, in which instead of having the paint applied by a brush the articles are painted 15 by immersion. I am aware that it is not new to keep the paint in the tank in which the articles are immersed agitated by means of a revolving screw or beater located in the bottom of the tank, and I am also aware that it 20 is not new to prevent the articles being painted or the tools used by the workmen from coming in contact with the said revolving screw or beater by means of a guard located directly above the said beater; but it has been 25 found in practice that when the beater or agitator is at rest the heavier ingredients of the paint by reason of their greater specific gravity settle in the bottom of the tank and firmly embed in a more or less compact mass 30 the said agitator.

It is the object of my invention to provide a device which will prevent the heavier ingredients of the paint from settling about the agitator, so as to enable operation to be easily and quickly resumed after the device has been

at rest.

Figure I shows a vertical section of my device. Fig. II shows an end view of a central supporting-partition with the plates on which the paint settles shown in cross-section. Fig. III is an end elevation of said partition. Fig. IV is a top view of the plates on which the paint settles. Fig. V is a perspective view of the plate-supporting partition and a portion of the plates on which the paint settles.

1 is the paint-holding tank, designed to be filled or partially filled with paint. It has a curved bottom 2, in which is the agitator or beater 3, which is secured to a shaft 4, driven 50 by any suitable power. This agitator or beater 3 is placed close to the bottom of the

tank 1 and is adapted to keep the paint constantly stirred or agitated. 5 are brackets secured to the sides of the tank 1 and on which the partition 6 rests. Similar plates 7 are 55 placed at the ends of the tank and differ from the central partition 6 only in that the guides 8 and 9 are placed on one side thereof. The guides 8 are mere pins placed at the top of the partition and plates 6 and 7; but the 60 guides 9 are in the form of ribs and extend approximately to the bottom of the said partition 6 and plates 7. They are curved upwardly at the bottom, and about midway their extremities are curved out of a straight 65 line, as shown in Figs. II and III.

10 are pins placed just above the lower

curved ends of the guides 9.

11 are plates constructed of thin material, preferably metal, and seated between the 70 pins 8 10 and the guides 9.

12 is a deflector which is placed longitudinally through the center of the agitator directly above the two central plates 11.

It will be noticed that the plates 11 are sup- 75 ported so that they are somewhat oblique that is, at an angle with a perpendicular. Their lower edges are upturned to form pockets, and while normal, as shown in Figs. I and II, the main portions thereof form plane sur- 80 faces, yet the guides 9, which support them, are curved intermediate of their ends, so that upon the presence of weight on the plates 11 they will sag or bend and conform to the guides 9. The pins 10 hold the lower portions 85 of said plates and prevent the same from swinging outwardly or upwardly. When the heavier ingredients of the paint settle upon the said plates, they will be pressed in toward the guides or supports 9, and the lower edges 90 thereof will be forced outwardly toward or against the inner side of the adjacent plate. Thus they form a protection to the bottom 2 of the tank 1, and thereby prevent the heavier ingredients of the paint from settling about 95 the agitator. After the device has been at rest, as over night, the agitator 3 is free to be again revolved, and in its action it will throw with considerable force the thinner paint at the bottom of the tank up against 100 the upturned lower edges of the plates 11 and between said plates to agitate and throw the

heavier ingredients settled thereon up into the main body of the tank and thoroughly mix the same.

I claim as my invention—

1. In a paint-agitator, the combination with a tank and a beater therein; of plates mounted in said tank above said beater, extending downwardly in edgewise positions and provided with pockets at their lower edges, sub-

10 stantially as described.

2. In a paint-agitator, the combination with a tank and a beater therein; of plates mounted in said tank above said beater, extending downwardly in edgewise positions at an angle to the perpendicular and provided with pockets at their lower edges, substantially as described.

3. In a paint-agitator, the combination with a tank and a beater therein; of plates mount-

ed in said tank above said beater, extending 20 downwardly in edgewise positions and provided with pockets at their lower edges; and means for supporting said plates, said means being so constructed as to permit the depression of the central portions of said plates un-25 der the pressure of weight applied thereto, substantially as described.

4. In a paint-agitator, the combination with a tank and a beater therein; of plates mounted edgewise above said beater, extending 30 downwardly and provided with pockets at their lower edges; and a deflector arranged longitudinally of and above said plates, sub-

stantially as described.

CHARLES A. BROWN.

In presence of— E. S. KNIGHT, STANLEY STONER.