Mar. 6, 1923. 1,447,360.

A. G. SWAN.

TILTING BIN AND MOUNTING FOR SAME.

FILED APR. 5, 1922.

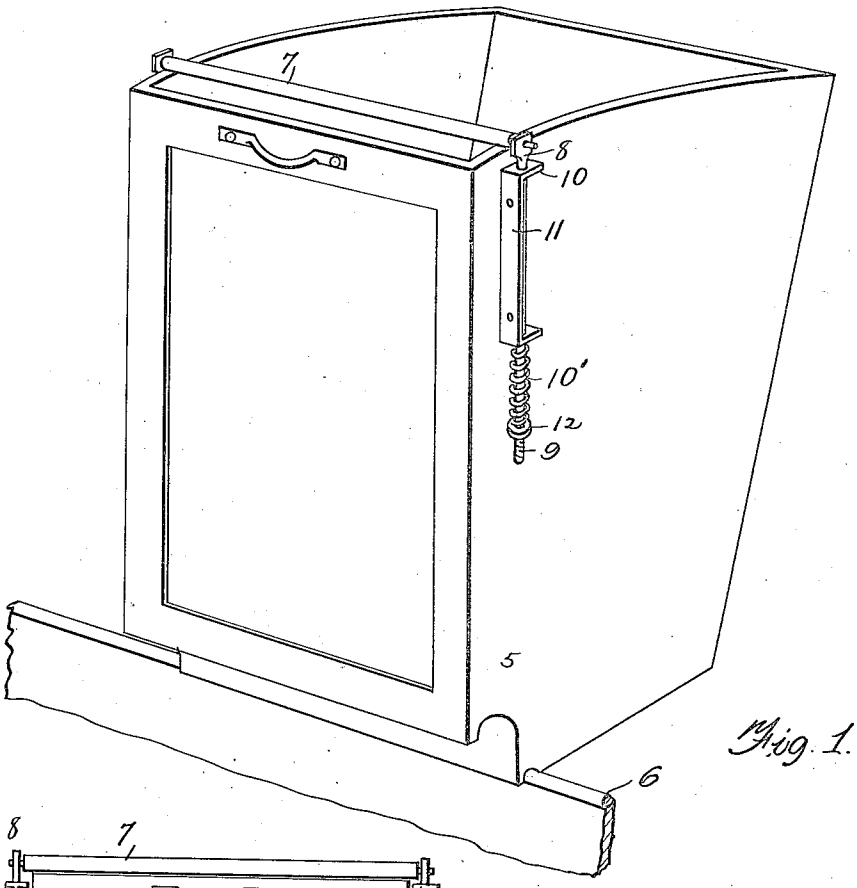


Fig. 1.

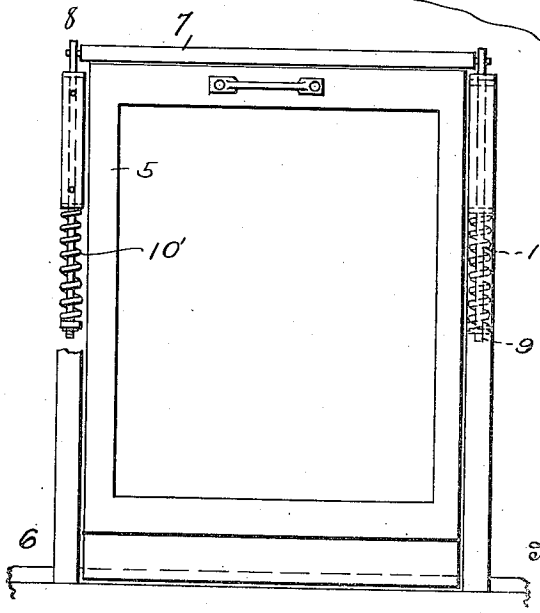


Fig. 2.

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UNITED STATES PATENT OFFICE.

ARTHUR G. SWAN, OF YAKIMA, WASHINGTON.

TILTING BIN AND MOUNTING FOR SAME.

Application filed April 5, 1922. Serial No. 549,887.

To all whom it may concern:

Be it known that I, ARTHUR G. SWAN, a citizen of the United States, residing at Yakima, in the county of Yakima and State of Washington, have invented certain new and useful Improvements in Tilting Bins and Mountings for Same, of which the following is a specification.

This invention relates to an improved tilting bin and a mounting for the same. The object of the invention is to provide a tilting bin which may be bodily removed, with very little trouble, from its mountings, so that the bin may be easily cleaned or the weight of its contents quickly ascertained. This latter is a feature of great importance in taking inventory where the contents of a large number of bins must be inventoried. In this case it is not necessary to empty the bins but is only necessary to remove the bin bodily from its mounting together with its contents and to weigh the bin and contents and thereafter to subtract the known weight of the bin.

Further objects and advantages of the invention will be set forth in the detailed description which follows.

In the accompanying drawing:

Fig. 1 is a perspective view of a bin of the character to which this invention relates; and Fig. 2 is a front elevation thereof.

In the drawing 5 designates a tilting bin such as is commonly employed in stores, such as grocery stores, feed stores and many others. The lower front corners of these bins are mounted to rock about a rod 6 and as ordinarily constructed the bins are not readily removable from their casing. In carrying out the invention, I mount a roller 7 in vertically movable bearing brackets 8, these bearing brackets being carried by vertical rods 9 which slide through horizontal extensions 10 of a fixed keeper plate 11. It will of course be understood that the structure is identical at each side of the bin and that each of the bearing brackets 8 is suitably movable with its rod 9. These rods are normally pressed downwardly by springs 10′ which bear between the undersides of the lower horizontal extensions 10 of the keeper plates 11 and nuts 12 which are threaded upon the lower ends of the rods 9 and which nuts serve to adjust the tension of the springs 12. Thus the roller 7 is caused to bear yieldingly upon the upper edge of the bin and impart such resistance to the movement of the pin as to prevent the same from opening or closing with a bang.

When it is desired to remove the bin as a whole the roller 7 will yield bodily upwardly to permit the bin to be lifted enough to free its lower front corner from the rod 6. Thereupon the bin may be lifted out along with its contents. In replacing the bin the lower rear corner of the bin is first engaged with the rod 6, the roller 7 is lifted and the bin is slipped in beneath the roller 7 and said roller is then released to permit it to be drawn downwardly by the spring 10′ and be brought into engagement with the upper edges of the bin.

The provision of the nuts 12 renders it possible to properly adjust the tension of the roller 7. In other words, these nuts provide means for determining the degree of pressure with which the roller 7 will bear upon the upper edge of the bin. This is of importance since it is not necessary to have the roller bear so strongly upon the upper edge of the bin where the bin is filled with a light material, such as corn flakes or bran, as is the case where the bin is filled with a heavier material, such as sugar, for example.

It is to be understood that the invention is not limited to the precise construction set forth but that it includes within its purview whatever changes fairly come within either the terms or the spirit of the appended claims.

Having described my invention what I claim is:

1. A tilting bin comprising a mounting for the lower front corner of said bin about which said bin rocks and a vertically yieldable pressure element engageable with the upper edges of the bin and movable thereover tending to hold the bin into engagement with said mounting but yieldable to permit disengagement of the bin from said mounting.

2. In combination a tilting bin, a rocking mounting for the lower front corner of said bin, a spring actuated vertically movable bearing and a member carried by said bearing and bearing upon the upper edge of the bin.

3. In combination a tilting bin, a rocking mounting for the lower front corner of said bin, a roller traversing the top of said bin and bearing upon the upper edges thereof

and vertically yieldable brackets for said roller.

4. A structure as recited in claim 3 wherein said vertically yieldable bearing brackets are spring actuated and means for adjusting the tension of said spring.

5. In combination a tilting bin, a rocking mounting for the lower front corner of said bin, fixed keeper plates, vertically movable rods carried by said keeper plate, springs tending to thrust said rods downwardly, means for adjusting the tension of said springs, bearing brackets carried by said rods and a roller mounted in said bearing brackets and bearing upon the upper edge of said bin.

In testimony whereof I affix my signature in the presence of two witnesses.

ARTHUR G. SWAN.

Witnesses:

TILLIE E. GEADTKE,

CONSTANCE L. MACWAIN.