

(No Model.)

J. GOODMAN.  
GLASS BATCH MIXER.

No. 490,346.

Patented Jan. 24, 1893.

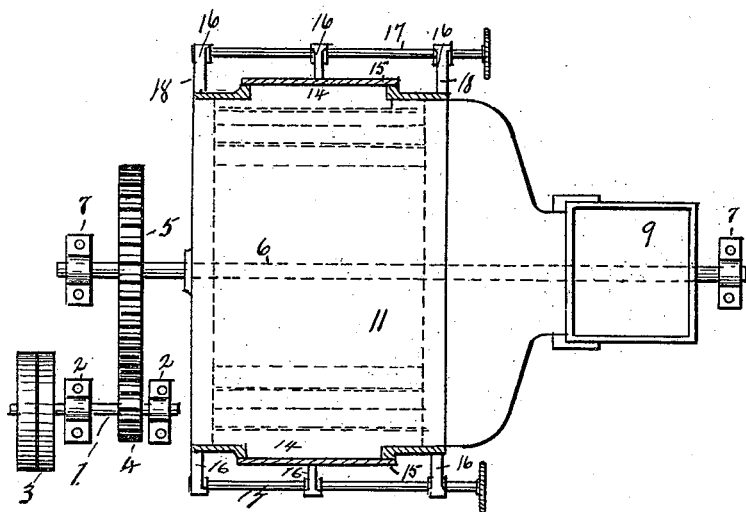


Fig. 1.

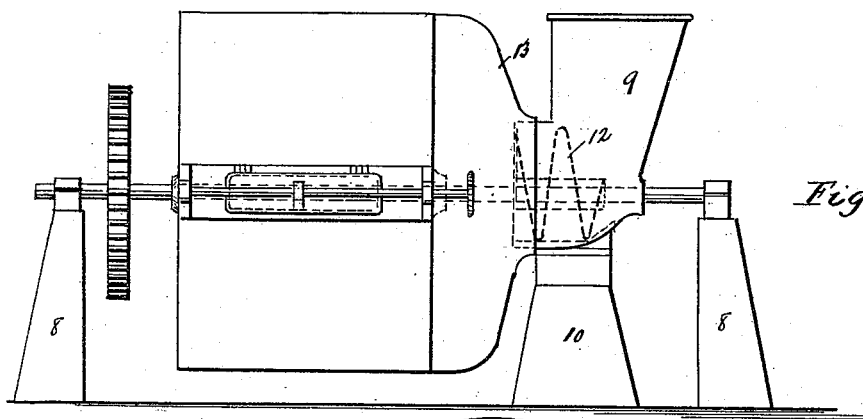


Fig. 2.

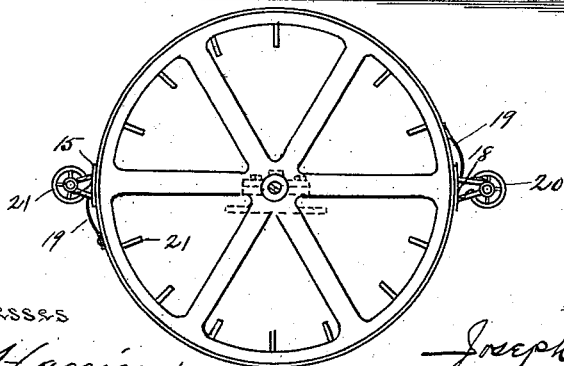


Fig. 3.

Witnesses  
M. C. Harrison,  
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Inventor,  
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per  
His atty J. H. Roney

# UNITED STATES PATENT OFFICE.

JOSEPH GOODMAN, OF PITTSBURG, PENNSYLVANIA.

## GLASS-BATCH MIXER.

SPECIFICATION forming part of Letters Patent No. 490,346, dated January 24, 1893.

Application filed July 14, 1892. Serial No. 439,965. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH GOODMAN, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Glass-Batch Mixers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 indicates a plan of my improved batch mixer. Fig. 2, is a side elevation of the same. Fig. 3. is an end view of the cylinder of the same.

My invention relates to devices adapted to mix ingredients which compose what is commonly called the "batch" used in the production of glass, and this object I accomplish by the device which as hereinafter more specifically described consists of a stationary bin or hopper, a cylinder communicating therewith and other novel features of construction which will appear by reference to the accompanying drawings forming part hereof in which like figures indicate like parts wherever they occur.

Referring to said drawings 1 is a power shaft suitably secured in bearings 2 and having suitably mounted thereon a belt pulley or pulleys 3 and a small spur wheel 4 which meshes with and communicates power to a larger spur wheel 5 mounted on the counter shaft 6 which is suitably journaled in bearings 7 in the standards 8 said shaft 6 passes through respectively, the stationary bin or hopper 9 secured upon the top of the platform 10 which is secured to the floor of the apartment in which said device may be located, and the large cylinder or drum 11 which is rigidly secured thereto and adapted to be rotated thereby. Said bin or hopper may be provided with a worm or screw 12 for the purpose of assisting the discharge of batch from said bin in the event of the same being moist or damp and inclined to feed too slowly into said drum or cylinder. The end of said cylinder contiguous to said bin or hopper tapers into a collar 13 adapted to fit neatly and rotate around the inner end of said hopper. The sides of said cylinder are provided with discharge openings 14 adapted

to be closed by valves 15 which are adapted to be maintained closed by the pawls 16 secured upon the shaft or shafts 17 which are journaled in the brackets 18 extending from the periphery of said cylinder and to be thrown open by the reaction of the spring or springs 19 when said pawls are thrown out of contact with said valves by rotating or turning the hand wheel 20 secured upon one end of the shaft whereon said pawls are secured. The interior of said cylinder is provided with a series of paddles 21 which serve to thoroughly mix or agitate the batch during the rotation of said cylinder. One of the many advantages of my mixer is, that batch may be constantly charged into the hopper or bin during the rotation of the cylinder for the purpose of mixing the same.

The operation of my device is so obvious that I do not deem it necessary to further describe the same.

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

1. In a batch mixer substantially as described, the combination of a bin or hopper a rotary cylinder communicating therewith and adapted to be rotated, and having a number of valves adapted to regulate the discharge of batch therefrom and means to rotate said cylinder substantially as and for the purpose herein described.

2. In a batch mixer substantially as described, the combination of a bin or hopper having a screw or worm secured therein, a rotary cylinder communicating with said bin and adapted to receive batch therefrom, and having a number of valves adapted to regulate the discharge of said batch, and means to rotate said cylinder substantially as and for the purpose set forth.

3. In a batch mixer substantially as described the combination of the bin "9" the cylinder "11" having valves, the pawls "16" and springs "19" adapted to maintain said valves closed and to open same substantially as described.

In testimony that I claim the foregoing I hereunto affix my signature this 7th day of July, A. D. 1892.

JOSEPH GOODMAN. [L. S.]

In presence of—

ALBERT J. WALKER,  
ELMER N. STONER.