

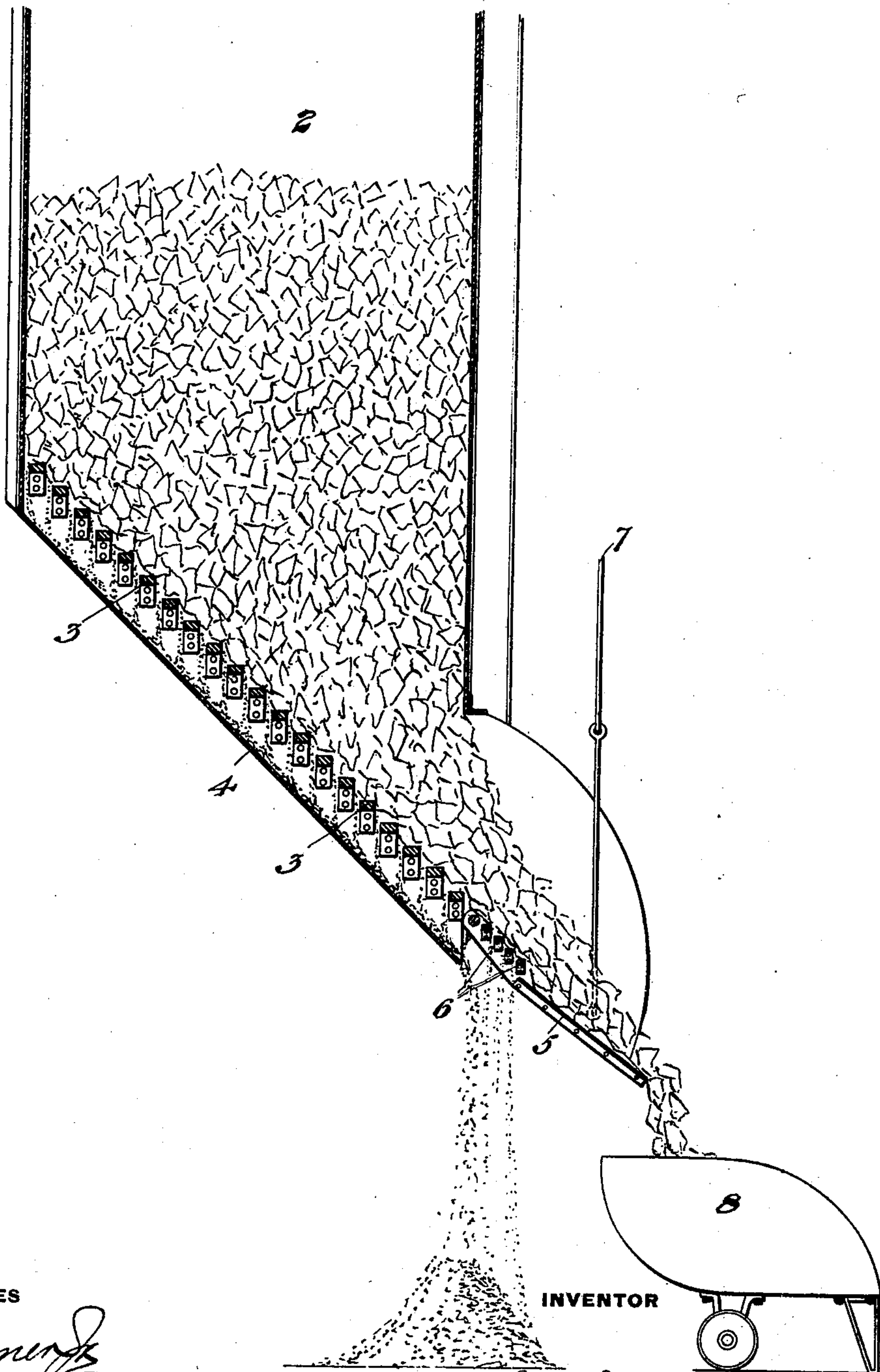
No. 669,205.

Patented Mar. 5, 1901.

E. L. MESSLER.  
STORAGE BIN.

(Application filed Sept. 25, 1899.)

(No Model.)



WITNESSES

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# UNITED STATES PATENT OFFICE.

EUGENE LAWRENCE MESSLER, OF PITTSBURG, PENNSYLVANIA.

## STORAGE-BIN.

SPECIFICATION forming part of Letters Patent No. 669,205, dated March 5, 1901.

Application filed September 25, 1899. Serial No. 731,546. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE LAWRENCE MESSLER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Storage-Bins, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which the figure is a vertical cross-section of a bin constructed in accordance with my invention.

My invention relates to the bins employed for storing coke, coal, &c.; and it is designed to provide a bin which will automatically separate the finer portions as the contained material passes to the outlet.

In the drawing, 2 represents a bin having a sloping bottom composed of bars 3, arranged in step fashion in a descending series from the back to the front of the bin. These bars are preferably rectangular in cross-section and extend transversely of the bin or parallel with its back. The bars are placed a sufficient distance apart, measured on horizontal planes, to permit the screenings to drop through upon a false bottom 4, down which they slide into a heap or receptacle at its lower end. The bars being arranged in step fashion, the shortest distance between their edges will be greater than the distance measured horizontally, thus permitting any particles that might clog the openings to drop or be drawn out backwardly and downwardly by the action of the material sliding down the bottom.

I prefer to use with the bin a chute 5, having a somewhat similar construction of its bottom 6, this chute being hinged and arranged to be swung by a suitable connection 7. The screened material passing over the chute drops into a suitable receptacle 8.

The bottom of the bin should be arranged at an angle of not less than forty-five degrees to a horizontal plane.

The advantages of my invention will be apparent to those skilled in the art, since the material in sliding down toward the outlet automatically screens itself, the finer particles dropping between the stepped bars.

The bin may be used for the grading of materials by placing the bars at graduated distances apart, those nearest together being at the back and thence widening toward the bottom, separate bins being placed beneath the various portions, and many other variations may be made in the form and arrangement of the parts without departing from my invention.

I claim—

1. A storage-bin for granular materials, having vertically-extending front and rear walls connected by a sloping bottom upon which the stored material normally rests statically, the said bottom being composed of separated bars, said bin having an opening in its side at the lower end of the bottom, and a movable gate for the opening; substantially as described.

2. A storage-bin for lump or granular materials, having vertically-extending front and rear walls connected by a sloping bottom upon which the stored material is normally supported at rest, said bottom being formed of separated bars arranged in step fashion, and extending parallel with the back and from side to side, said bin having an outlet-opening in its front at the lower end of the sloping bottom, and a swinging chute for said outlet; substantially as described.

In testimony whereof I have hereunto set my hand.

EUGENE LAWRENCE MESSLER.

Witnesses:

GEORGE F. PITTS,  
ADDA HICKEY.