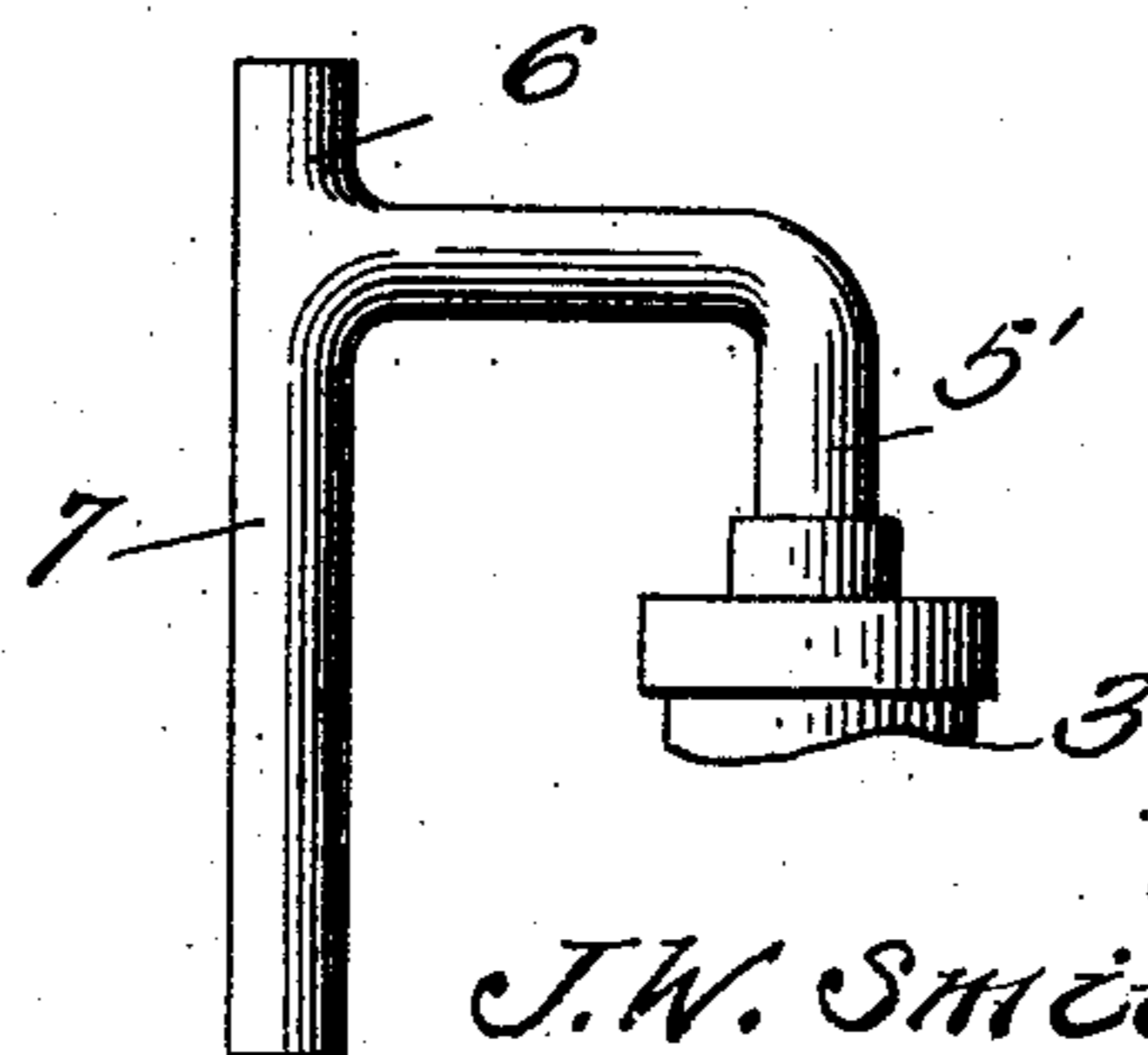
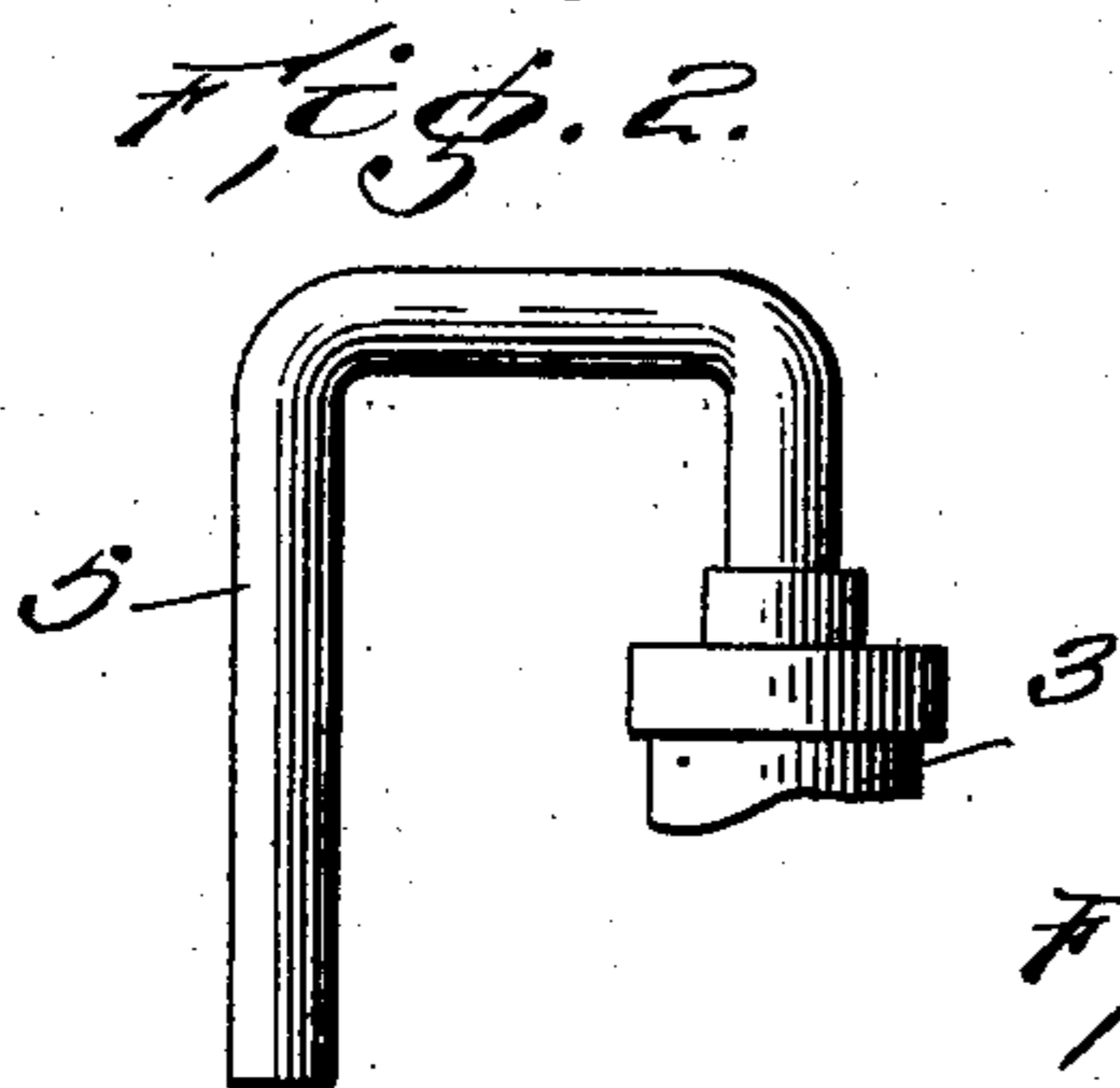
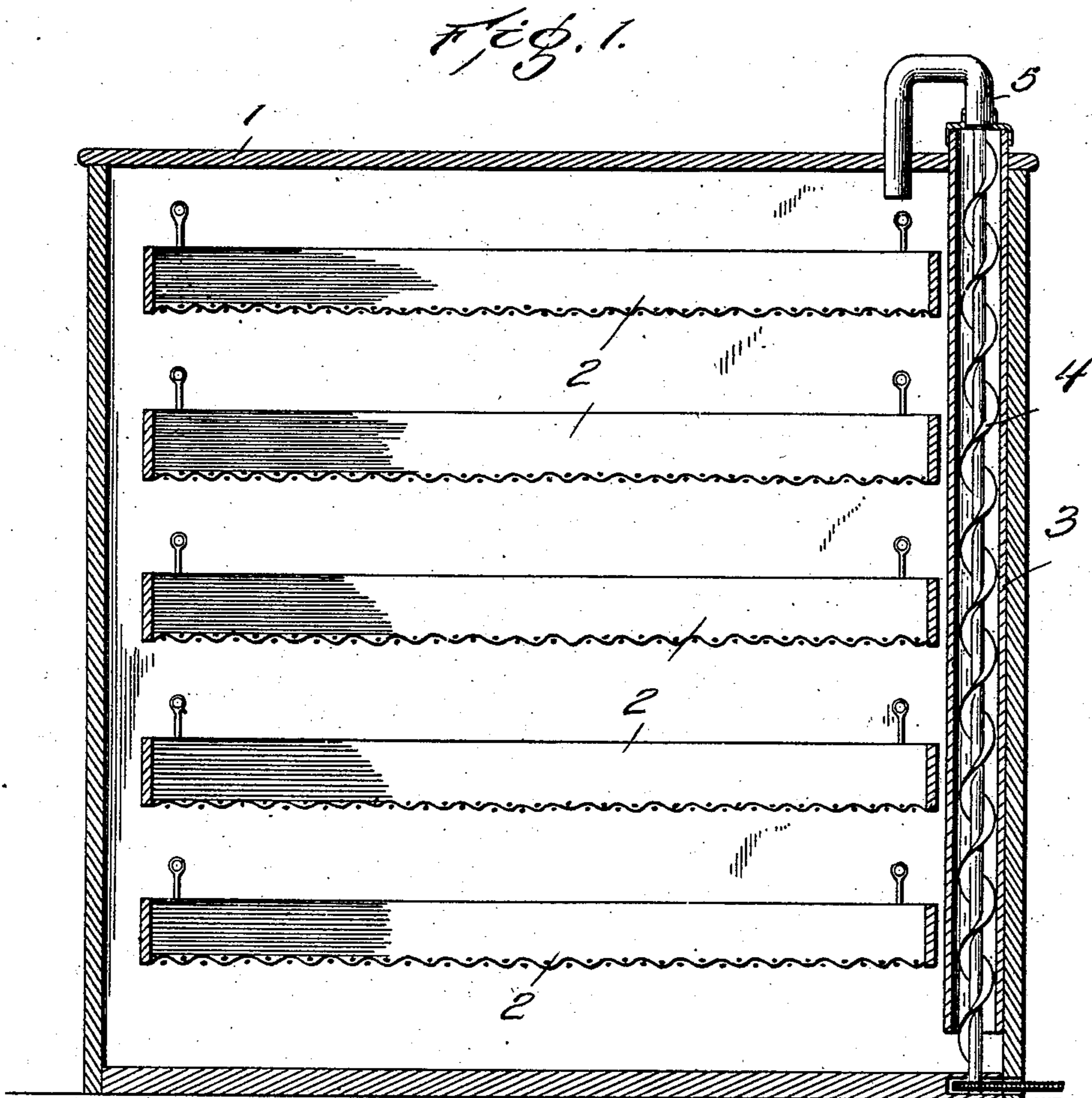


No. 849,863.

PATENTED APR. 9, 1907.

J. W. SMITH.
GRAIN BOLTER AND SEPARATOR.
APPLICATION FILED JAN. 5, 1906.



Witnesses
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JAMES W. SMITH, OF SYCAMORE, MISSOURI.

GRAIN BOLTER AND SEPARATOR.

No. 849,863.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed January 5, 1906. Serial No. 294,796.

To all whom it may concern:

Be it known that I, JAMES W. SMITH, a citizen of the United States, residing at Sycamore, in the county of Ozark, State of Missouri, have invented certain new and useful Improvements in Grain Bolters and Separators; 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 appertains to make and use the same.

This invention relates to grain separators or bolters.

The object of the invention is to provide the conveyer of the bolter or separator with a transparent connection, whereby the quantity of grain or flour delivered to the screens, shakers, or sifters of the bolter or separator may be readily determined without stopping the feed or removing any part of the device.

With the above and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a longitudinal sectional view of a bolter or separator having my improvement applied thereto. Fig. 2 is a detail view of my invention disconnected from a bolter or separator. Fig. 3 is a detail view of a modified form of my invention.

Referring now to the drawings, the present invention comprises a casing A, having a top 1, and within the casing there are arranged a plurality of superposed shakers 2. A vertical conveyer-tube 3 is located at one side of the casing therewithin and extends upwardly through the top of the casing, where it is detachably connected therewith, a cap B having a central opening C, in which there is engaged one end of a pipe 5, this pipe extending upwardly from the cap B, then laterally, and then downwardly through an open-

ing D in the top 1 of the casing, the lower end of this portion of the pipe being arranged to discharge into the uppermost shaker 2, and the pipe 5 is formed of transparent material, such as glass, so that the passage of matter therethrough may be clearly noted from the exterior of the casing. The usual spiral conveyer 4 is located within the tube 3 and discharges into the pipe 5, as will be readily understood.

As shown, a flange E extends upwardly around the opening C and incloses a portion of the pipe 5. As shown, the tube 3 extends upwardly through an opening F in the top 1.

In another form of the invention I provide the glass or other transparent connection with an upwardly-directed projecting portion 6 and a downwardly-projecting portion 7, as clearly shown in Fig. 3. In either form of the invention the same function is performed.

In the use of my invention it will be apparent that in the event of failure on the part of any one of the shakers, sifters, or screens to perform their function, thereby causing a possible clogging or other defect in the operation of the apparatus, the difficulty will be quickly observed.

What is claimed is—

In a bolter, the combination with a casing, a conveyer-tube located therewithin and extending upwardly through the top thereof, a cap removably engaged with the upper end of the tube, a pipe having one end engaged in the cap, said pipe extending upwardly from the cap and then laterally and then downwardly through the top of the casing, a conveyer within the tube arranged to discharge into the pipe, and mechanism within the casing arranged to receive matter from the pipe, said pipe being formed of transparent material.

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

JAMES W. SMITH.

Witnesses:

JNO. JAMES,
W. H. SMITH.