No. 823,117. PATENTED JUNE 12, 1906.

O. GRISMORE.

SPOUT FOR SIFTING MACHINES.

APPLICATION FILED AUG. 4, 1905.

Fig. 1.

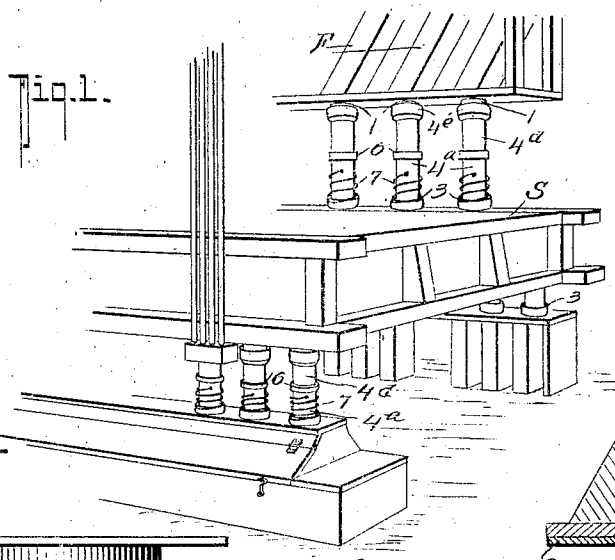


Fig. 2.

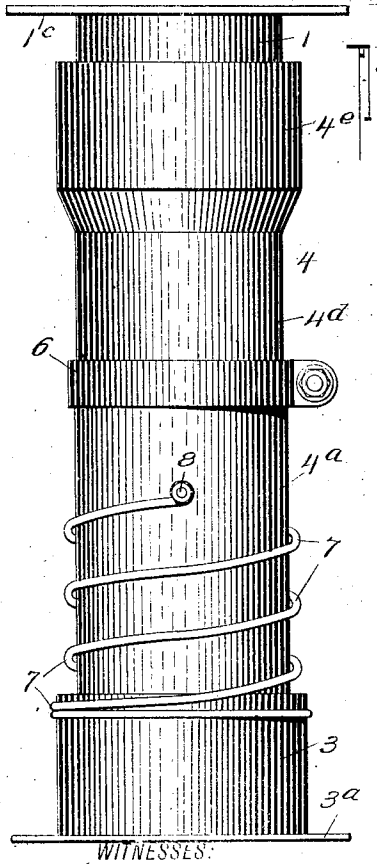


Fig. 4.

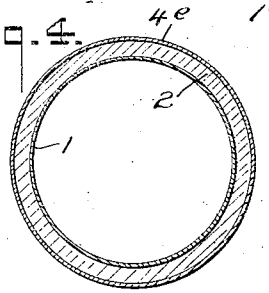


Fig. 5.

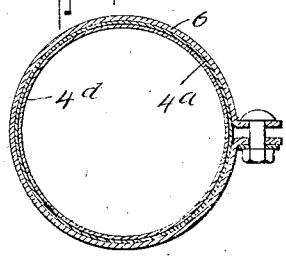


Fig. 6.

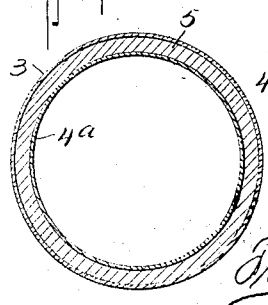
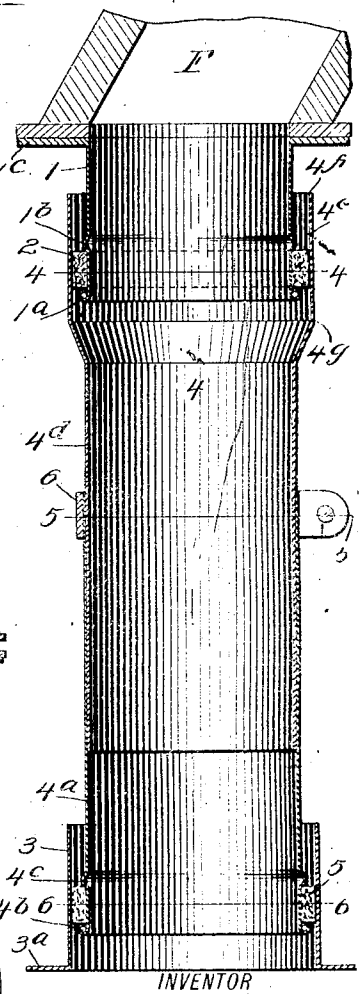


Fig. 3.



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SPOUT FOR SIFTING-MACHINES.

No. 823,117. Specification of Letters Patent. Patented June 12, 1906.

Application filed August 4, 1905. Serial No. 272,695.

To all whom it may concern:

Be it known that I, OSCAR GRISMORE, residing at McCook, in the county of Redwillow and State of Nebraska, have invented certain new and useful Improvements in Spouts for Sifting-Machines, of which the following is a specification.

My invention relates to certain new and useful improvements in sifter-spouts for use in connection with sifting-mills and machinery to take the place of the usual cloth "stockings" now in common use for connecting the feed-spouts with the vibrating portion of the machine and for connecting the discharge-spouts of the vibrating portion of the machine with the outlet members of the machine.

Generically my invention includes a telescopic spout constructed of sheet metal to be adjustable to the different lengths to enable it to be used on machines of different makes, and one section of the spout connects with the feed-aperture of the machine, while the other section connects with the discharge-aperture of the apparatus through the medium of a telescopic connection, having a felt washer or packing interposed between the two telescopic portions of the connection to enable the desired motion to be maintained in the active parts of the machine without endangering the structure, arrangement, or connection of the spout after it has been once placed in position.

My invention also includes means for maintaining the spout in its adjusted position and means for counterbalancing the weight of the spout to always hold it in its set positions with respect to the parts which it connects.

Primarily my invention has for its object to provide a spout of this character of a very simple economical construction, which can be easily and cheaply manufactured and which will readily and effectively serve its intended purposes.

With other objects in view than have heretofore been enumerated the invention also comprises certain novel construction, operation, and arrangement of parts, all of which will be first described in detail, and then specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention as applied for use. Fig. 2 is an enlarged side elevation of my invention. Fig. 3 is a vertical longitudinal section thereof. Fig. 4 is a cross-section on the line 4 4 of Fig. 3. Fig. 5 is a cross-section taken on the line 5 5 of Fig. 3. Fig. 6 is a cross-section taken on the line 6 6 of Fig. 3.

Referring now to the accompanying drawings, in which like numerals and letters of reference indicate like parts in all of the figures, 1 designates a short tubular section having its lower end rolled up to provide a peripheral roll 1^a, and the said section 1 is provided with an annular bead 1^b, spaced slightly inwardly from the end of the roll 1^a, to receive a washer or packing 2, of felt or other suitable material, between the bead 1^b and the peripheral roll or bead 1^a, as shown. The tubular section 1 has a base-plate 1^c, which is nailed, screwed, or otherwise secured over the bottom of the sifter discharge-aperture, as shown.

3 designates a second tubular member having a base-plate 3^a, which is secured to the floor or a pocket in the floor, into which the material is to be discharged when my invention is used between the sifter-machine and the discharge therefor; but when my invention is used between the feed-troughs F and the sifter machine S then the member 1 is fastened to the feed-trough F and the member 3 to the sifter S over the inlet-aperture thereof.

The tubular section 3 is of greater diameter than the tubular section 1 and is adapted to receive the lower tubular portion 4^a of the sifter member 4, which portion 4^a is provided at its lower end with a roll or bead 4^b and an annular bead 4^c, spaced upwardly to receive a washer or packing 5, of felt or other suitable material.

Telescopically fitted into the section 4^a of the spout 4 is a second spout-section 4^d, whose upper end is enlarged, as at 4^e to telescopically fit over the tubular member 1 and to snugly receive the washer 2, as shown, thus forming a telescopic connection between the spout-section 4^d and the tubular member 1, as shown.

The spout-section 4^a, together with its washer or packing 5, is telescopically fitted into the section 3, as shown.

6 designates a clamping-band taking around the outer tubular section 4^a of the spout 4 at its other end, whereby the two sections 4^a 4^d are clamped together to serve as a single spout after they have been adjusted with respect to the members 1 and 3.

To hold the spout 4 in its proper position

with respect to the members 1 and 3, with the felt washer or packing 2 disposed midway the upper edge 4^f and the lower edge 4^g of the enlarged portion 4^e of the section 4^d of the spout 4, and to hold the sections in position with the washer or packing 5, held about midway the ends of the member 3, I provide a coil-spring 7, which takes around the outer section 4^a and is secured at one end 7^a to section 4^a by a bolt 8, and the said coil-spring 7 has its other end secured to the member 3, whereby the weight of the spout 4 will be sustained by the spring 7 to hold it always in its proper correlative position with respect to the members 1 and 3 to serve as a buffer or balance-spring for the spout 4, thus allowing for the necessary motion in the moving parts of the sifter without interfering or disconnecting the spout 4 from the members 1 and 3.

The spring 7 also serves as a compensator to compensate for the movement of the movable parts of the sifter mechanism S.

From the foregoing it is thought that I have provided a very simple and effective construction of spout which is designed to displace the cloth stockings or connections which are now most commonly used in machines of the type well known to the trade. By making the spout of telescopic sections the same can be adjusted to different lengths to allow it to be used on machines of different makes and types, and the spring 7 also holds the spout from rotating due to the action of the sifter mechanism.

In practice my invention can be manufactured in different sizes and styles to supply machines of different capacities.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the complete operation, construction, and many advantages of my invention will be readily understood by those skilled in the art to which it appertains, and I desire to say that many slight changes in the detailed construction, operation, and design of parts may be made without departing from the scope of the invention or the appended claims.

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

1. A device of the class described, comprising a tubular section adapted to be secured over a discharge-opening, said tubular section having a pair of annular beads, a packing held between said beads on said tubular section, a second tubular section adapted to be secured over a receiving-aperture, a tubular spout-section having its end telescopically held over said first-mentioned tubular section and in engagement with the packing thereof, a second tubular spout-section adapted to telescopically receive the first spout-section, said second spout-section having a pair of beads near one end thereof, and a packing held between said last-named beads and said second spout-section and said last-named packing adapted to be received by said second tubular section and means carried by one spout-section for securing the sections from telescopic movement substantially as shown and described.

2. A device of the class described, comprising a tubular section adapted to be secured over a discharge-opening, said tubular section having a pair of annular beads, a packing held between said beads on said tubular section, a second tubular section adapted to be secured over a receiving-aperture, a tubular spout-section having its end telescopically held over said first-mentioned tubular section and in engagement with the packing thereof, a second tubular spout-section adapted to telescopically receive the first spout-section, said second spout-section having a pair of beads near one end thereof, and a packing held between said last-named beads and said second spout-section and said last-named packing adapted to be received by said second tubular section, means for clamping said spout-sections together, and means for holding said spout-sections in proper position with respect to the first and second mentioned tubular members.

3. A spout for sifting-machines, comprising a plurality of telescopic sections, the end sections of each adapted to be secured over feed and discharge openings, means for holding the intermediate sections in position with respect to the end sections and preventing the intermediate sections from turning on their longitudinal axis, said means comprising a coil-spring secured to one end section and to the intermediate section, and means for locking said intermediate sections together substantially as shown and described.

4. A spout of the class described, comprising a tubular section, having a peripheral roll or bead 1^a at one end and an intermediate bead 1^b, a tubular spout-section 4^d spaced telescopically over said tubular section, and adapted to receive a packing 2 between it and the section 1 to form a snug joint therewith, a second tubular section 3, a second tubular spout-section 4^a adapted to receive the first spout-section 4^d and provided at one end with a peripheral bead 4^b and an intermediate bead 4^c, a packing 5 held on said second spout-section between said last-named beads, said tubular section 3 adapted to receive said second spout-section 4^a with the packing 5 between the tubular member 3 and the section 4^a to form a snug joint therewith, a clamping device for securing said spout-sections 4^a 2^d together, and a supporting-spring 7 secured to one spout-section and to one of the end sections 3, substantially as shown and described.

5. A spout of the class described, comprising four telescopic sections, means for secur-

ing the end sections respectively to the feed and discharge openings of a sifting-machine, means for securing the two intermediate sections together to prevent telescopic movement between the same and means secured to one of the intermediate sections and one of the end sections for holding the intermediate sections in position with respect to the end sections and holding the intermediate sections from turning on their longitudinal axis substantially as shown and described.

6. A device of the class described, comprising a tubular section adapted to be secured over a discharge-opening, a packing held near the end of the said tubular section, a tubular spout-section having its end telescopically held over said first-named tubular section, and in engagement with the packing thereof, a second tubular spout-section adapted to telescopically receive the first spout-section, a packing held on said second spout-section near the end thereof, said second spout-section adapted to discharge into a receiving-aperture, and means for clamping said spout-sections together as shown and described.

7. A device of the class described, comprising a tubular section adapted to be secured over a discharge-opening, a packing held near the end of the said tubular section, a tubular spout-section having its end telescopically held over said first-named tubular section, and in engagement with the packing thereof, a second tubular spout-section adapted to telescopically receive the first spout-section, a packing held on said second spout-section near the end thereof, said second spout-section adapted to discharge into a receiving-aperture, means for clamping said spout-sections together, and means for holding said spout-sections in position and from turning on their longitudinal axis substantially as shown and described.

OSCAR GRISMORE.

Witnesses:
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J. A. PIPER.