(No Model.)

F. J. WEBER.

SWIVEL FOR PNEUMATIC GRAIN PIPES.

No. 589,800. Patented Sept. 7, 1897.

FIG. 1.

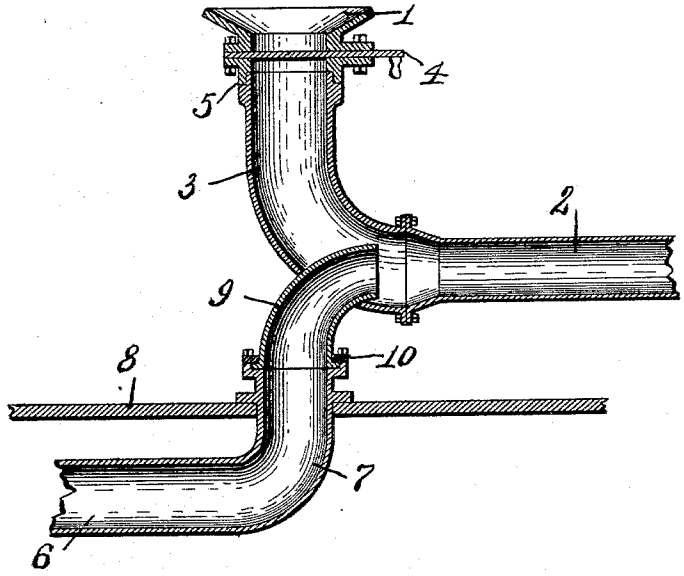
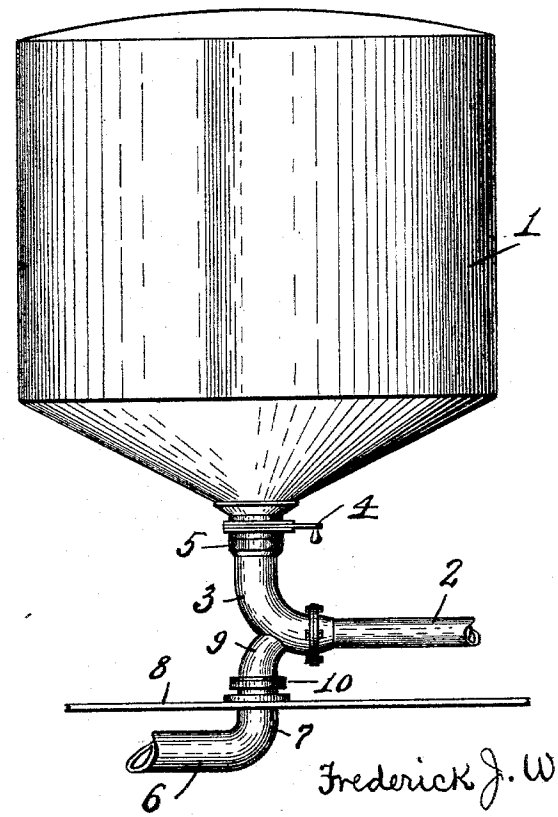


FIG. 2.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK J. WEBER, OF CONNERSVILLE, INDIANA, ASSIGNOR TO THE STEEL STORAGE AND ELEVATOR CONSTRUCTION COMPANY, OF SAME PLACE.

SWIVEL FOR PNEUMATIC GRAIN-PIPES.

SPECIFICATION forming part of Letters Patent No. 589,800, dated September 7, 1897.

Application filed June 21, 1897. Serial No. 641,583. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK J. WEBER, of Connersville, Fayette county, Indiana, have invented certain new and useful Improvements in Swivels for Pneumatic Grain-Pipes, of which the following is a specification.

My invention relates to improvements in swiveling grain-pipes employed in moving grain by pneumatic means, and the improvements will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical section of my improved swivel, and Fig. 2 a side elevation of the same in connection with an exemplifying grain-receiver from which the grain is to be transferred.

In the drawings, 1 indicates an exemplifying receiver, to be assumed as containing grain or granular material which is to be transferred therefrom by the means of an air-blast; 2, the pipe through which the discharging grain is to pass from the receiver to the desired point of delivery; 3, an elbow forming the juncture between pipe 2 and the receiver, the exemplification showing this elbow as connecting directly with the receiver or, to speak more accurately, as having close connection with the receiver, which closeness is, however, quite unimportant; 4, a valve disposed in the connection between the elbow 3 and the receiver, the purpose of this valve being to control the flow of grain to the elbow; 5, a swivel juncture at the upper extremity of elbow 3, its axis being at right angles to the axis of pipe 2, so that pipe 2 is thus capable of turning about upon a vertical axis; 6, the air-pipe through which is to be conveyed the blast of air which is to propel the grain forward in pipe 2; 7, an elbow forming a part of pipe 6 and having its vertical axis in the axial line of swivel 5, the presence of elbow 7 as an elbow being merely an incident to the fact that air-pipe 6 is illustrated as being disposed horizontally; 8, a support for the upper portion of elbow 7, which support, in the ordinary use of pneumatic grain-transfer apparatus, will be a suitable deck or floor; 9, an elbow-nozzle extending from the upper end of elbow 7 into the base of elbow 3 and presenting its nozzle end toward pipe 2, elbow-nozzle 9 and elbow 3 forming, in effect, an integral structure, and 10 a swivel at the juncture of elbow-nozzle 9 with elbow 7, the axis of this swivel coinciding with that of swivel 5.

The air-blast discharges into pipe 2 from the nozzle and carries with it the grain coming down through elbow 3. Pipe 2 may be turned about in any direction, turning now on the common axis of elbow 3 and elbow-nozzle 9.

I claim as my invention—

The combination, substantially as set forth, of a discharge-pipe, an elbow having one extremity connected with said discharge-pipe, a swivel-joint at the other extremity of said elbow, an elbow-nozzle connected with said elbow and presenting its nozzle portion within said elbow toward said pipe and presenting its opposite extremity in the axial line of but away from said swivel-joint, a swivel-joint at the base of said elbow-nozzle and having its axis in line with that of the first-mentioned swivel, and an air-pipe connected with said elbow-nozzle through the medium of the last-mentioned swivel-joint.

FREDERICK J. WEBER.

Witnesses:
M. E. WEBER,
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