March 20, 1928. 1,663,161

W. C. FABER

ADJUSTABLE DEFLECTOR FOR SILO FILLERS

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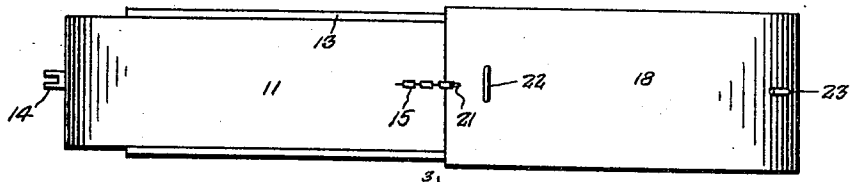


Fig. 1.

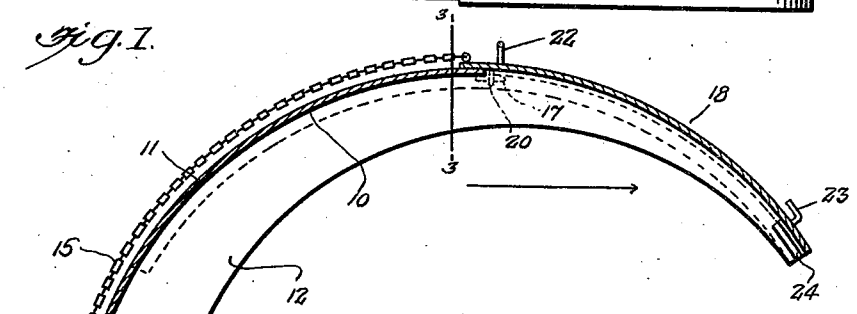
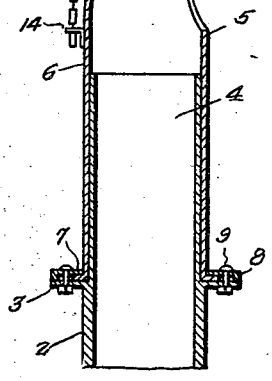


Fig. 2.



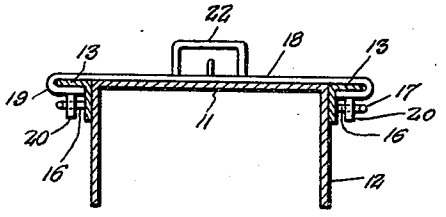


Fig. 3.

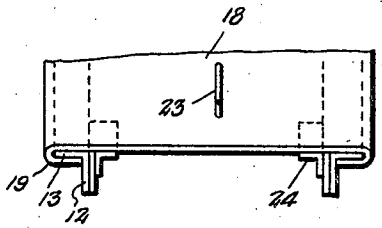


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM C. FABER, OF PAWPAW, ILLINOIS.

ADJUSTABLE DEFLECTOR FOR SILO FILLERS.

Application filed February 23, 1927. Serial No. 170,275.

The object of my present invention is the provision of a peculiar and advantageous adjustable deflector for silo fillers; and it consists in the improvement hereinafter described and definitely claimed.

In the accompanying drawing, forming part of this specification:—

Figure 1 is a top plan view of the deflector construction constituting the preferred embodiment of my invention.

Figure 2 is a vertical section of the same.

Figure 3 is an enlarged transverse section taken on the plane indicated by the line 3—3 of Figure 2, looking toward the right.

Figure 4 is an enlarged detail view illustrating the arrangement of the adjustable section of my novel deflector with its forward end flush with the forward end of the major member of the deflector.

Similar numerals designate corresponding parts in all the views of the drawing.

I show in Figure 2 a filler pipe 2 with a circumferential flange 3, and also with a tubular portion 4 extending a considerable distance above the circumferential flange, the said portion 4 being designed to counteract any lateral strain on the connection of the major member 5 of my improvement to the filler pipe 2.

As clearly illustrated in Figure 2 the major member 5 is provided with a vertical tubular portion 6 which surrounds and is turnable about the tubular portion 4 and is provided at its lower end with a flange 7, superposed upon the beforementioned flange 3. The said flange 7 is retained on the flange 3 through the medium of a flanged annulus 8 and bolts 9 connecting the annulus 8 to the flange 3, and surrounding the flange 7 so as not to interfere with the movement of the same about the pipe portion 4 and on the flange 3. By virtue of this construction, the major member 5 of my deflector is strongly connected to the filler pipe 2, and yet said member 5 is adapted to be turned about the pipe 2 as a center, and this without the imposition of strain on the connection described between the filler pipe 2 and the member 5.

In addition to the upright tubular portion 6 referred to, the major member 5 includes an overhanging arm 10 extending upwardly and laterally relative to the tubular portion 6.

The said arm 10 includes a curved wall 11 and skirt flanges 12 extending at right angles to the side edges of the wall 1, Figures 2 and 3. As will be noted from Figure 2, the side flanges 12 are tapered or gradually reduced in width forwardly, and it will also be noted that the said flanges 12 extend a considerable distance beyond the wall 11 for the purpose hereinafter pointed out. The arm 10 is provided at opposite sides with flanges 13, the said flanges 13 being of the length indicated by dotted lines in Figure 2 and being preferably comprised of angle irons fixedly connected to opposite sides of the arm 10. At the back of the upper end of the tubular portion 6 comprised in the major member 5 is a bifurcated lug 14, Figures 1 and 2, the said lug being to receive and engage links of a chain 15.

By comparison of Figures 2 and 3, it will further be understood that the arm 10 and the major member 5 is provided at opposite sides with abutments 16, preferably in the form of hooks, the shanks of which extend laterally outward from the sides of the arm 10 and terminate in rearwardly directed portions 17.

In addition to the elements named, my improvement comprises a longitudinally curvilinear endwise adjustable member 18. The said member 18 is provided with side channel portions 19 receiving the flanges 13 of the arm 10, and consequently it will be manifest that the member 18 is free to be moved lengthwise on the arm 10. At 20 the channel portions 19 of the member 18 are provided with pins, designed and adapted to bring up against the stop 16 on the arm 10 and thereby limit the forward movement of the member 18 and prevent disconnection of said member 18 from the arm 10. The before mentioned chain 15 is connected at 21 to the heel portion of the member 18, and hence it will be manifest that the chain 15 may be used for the retraction of the member 18 and may also be used to prevent casual forward movement of the member 18 beyond certain positions in which it is placed. A handle 22 is provided on the rear portion of the member 18 to facilitate endwise adjustment of the said member 18, and when deemed expedient, the member 18 may be provided on its forward portion with a hook 23. At 24, Figures 2 and 4, the member 18 is provided with shoes designed and adapted to rest and move against the inner side of the skirt flanges 12 with a view to rendering

easy the endwise movement of the member 18 and at the same time prevent lateral play of the member 18 on the arm 10.

In the practical use of my improvement, when a silo is filled to within about ten feet of the top, one man can sit there and operate my novel deflector, and in that way distribute the silage where it is desired, and in this connection it will be understood that when the member 18 of my improvement is moved rearwardly so that its forward end is spaced considerably in rear of the forward end of the arm 10, the silage may be shot across to the opposite side of the silo, and then by swinging the deflector on the pipe 2 all of the space within the wall of the silo can be covered.

In addition to the practical advantages ascribed to my improvements, it will be appreciated that the preferred embodiment of my invention is simple and inexpensive in construction, and at the same time is durable and therefore well adapted to withstand the usage to which devices of corresponding character are ordinarily subjected.

I have explicitly described the preferred embodiment of my invention in order to impart an understanding of the said embodiment in all of its details. I do not desire, however, to be understood as limiting myself to the precise construction shown, my invention being defined by my appended claims within the scope of which modifications may be made without departure from my invention.

Having thus described the invention, what I claim is:—

1. In combination, a silo filler pipe having a circumferential flange at an intermediate point and also having a tubular portion extending above said flange, a deflector member having a tubular portion surrounding said tubular portion of the filler pipe and flanged at its lower end to bear on the flange of the filler pipe and also having a curvilinear arm with a curved back wall and with skirt flanges extending therefrom, said skirt flanges extending a considerable distance beyond the forward end of said curved wall, an annulus superposed on the flange of said deflector member, and also superposed on the flange of the filler pipe and connected to the latter flange, and a curvilinear extensible member mounted on the said arm of the deflector, and adapted when retracted to permit of ensilage being shot between the forward portions of the skirt flanges of the arm; the said arm of the deflector being provided with side flanges, and the said endwise adjustable curvilinear member being provided with channel portions receiving said flanges of the arm, and the arm being provided with stop means, and the endwise adjustable curvilinear member being provided with means to bring up against said stop means.

2. In an adjustable deflector for silo fillers, and in combination, a curvilinear arm having a back wall and skirt flanges, and also having its skirt flanges extended a considerable distance beyond its curvilinear back wall, and a rigid curvilinear lengthwise slidably adjustable member engaged with and adjustable bodily on the said arm, and adapted when retracted to permit of ensilage being shot between the forward portions of the skirt flanges.

In testimony whereof I affix my signature.

WILLIAM C. FABER.