(No Model.)

F. WULFERT.

GRAIN SCREEN.

No. 348,090. Patented Aug. 24, 1886.

Fig. 1.

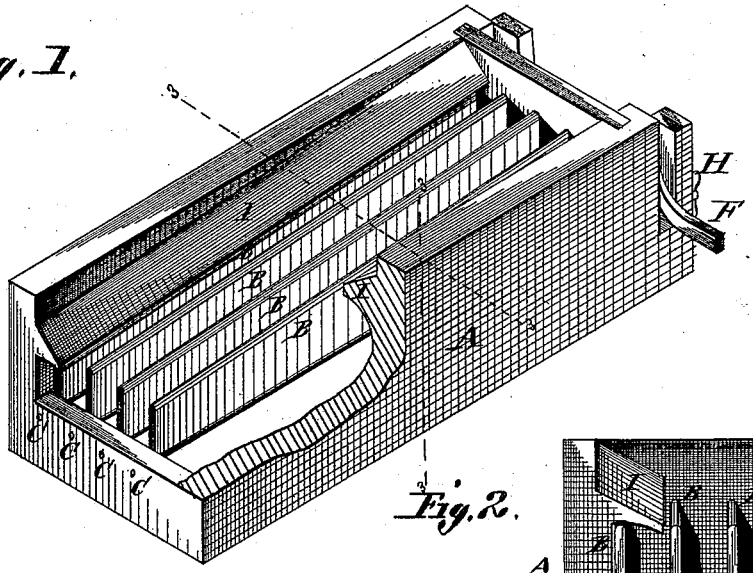


Fig. 2.

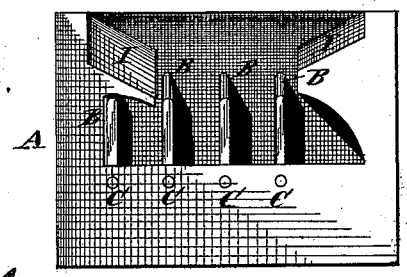


Fig. 3.

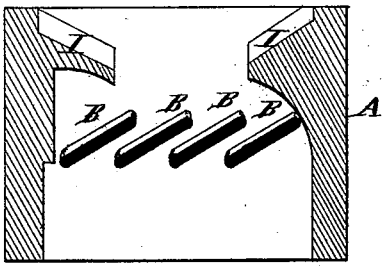
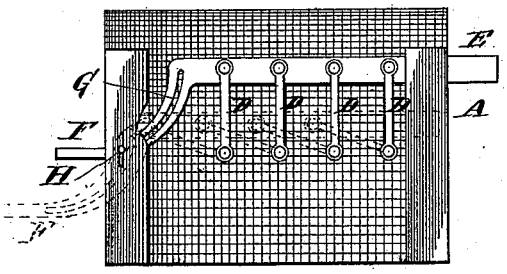


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRIEDRICH WULFERT, OF ST. CHARLES, MISSOURI.

GRAIN-SCREEN.

SPECIFICATION forming part of Letters Patent No. 348,090, dated August 24, 1886.

Application filed January 25, 1886. Serial No. 189,671. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH WULFERT, of St. Charles, in St. Charles county and State of Missouri, have invented a certain new and useful Improvement in Grain-Screens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view, part broken away, of my improved screen. Fig. 2 is a lower end view. Fig. 3 is a transverse section taken on line 3 3, Fig. 1. Fig. 4 is a front or upper end view.

My invention relates to a grain-screen to separate the refuse matter from the grain; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the shoe of the screen, which is reciprocated in any well-known manner.

I have not shown the means for reciprocating the screen, nor the machine in which it is designed to be used, for the reason that they form no part of my present invention.

B represents adjustable bars or plates, of which there may be two or more, as desired, as the number would depend largely upon the size of the shoe. They have gudgeons or journals C, which fit in sockets or perforations made in the ends of the shoe, as shown in Figs. 1 and 2. At one end of the shoe these gudgeons or journal projections have cranks D, secured rigidly to them, as shown in Fig. 4, and connected to the upper end of these cranks is a bar, E, by which the bars B are adjusted to increase or diminish the size of the openings between them. This bar has a projecting end, F, by which it is moved to move the bars, and this projecting end extends through a slot made in one side of the shoe, (see Fig. 1,) and where it extends through this opening it has a slot, G, through which passes a set-screw, H, in the end of the shoe.

It will be observed that the bar E has a "parallel movement;" hence in order to enable the slot G to move freely over the fixed stem of the set-screw H, said slot must be formed on an arc whose radius is equal to that of the arc described by the point of connection between the links D and said bar E, and its position should be such that when the bar is in its uppermost position the pin will occupy the bottom of the slot, and vice versa. By tightening the set-screw this bar, and consequently the bars B, are held to any adjustment to which they may be placed.

To prevent too large openings between the bars B and the sides of the shoe, I form overhanging ledges I on the side walls of the shoe, as shown. These ledges overhang the outside bars, B, except when they are vertical, as shown in Fig. 2, or nearly closed, as shown in Fig. 3, so when in either of these positions there will not be a large opening between either outside bar and the side wall of the shoe.

By placing the bars B in the position shown in Fig. 3 the grain will pass slowly between them and the dirt be blown over at the tail of the shoe, and by moving the bars open more or less from the position shown in Fig. 3 to that shown in Fig. 2 the grain will pass more rapidly through the bars, and thus the bars may be adjusted to give any spaces desired between them.

I am aware that it has been proposed to construct a grain-screen of the same character as that herein described of a number of parallel bars oval or round in cross-section; but such is not the equivalent of a screen formed of bars having parallel sides, for the reason that pieces of cob or other foreign substances are much less liable to become wedged or lodged between bars of the latter than between those of the former shape.

I am also aware that bars having parallel sides have been journaled in a shoe and provided with means for adjusting them upon their journals for the purpose of regulating the size of the spaces between them, and consequently the strength of the current of air passing between them; but this is obviously not the equivalent of my invention, the object of which is to render grain-screens of the character described less liable to become choked by foreign substances.

I claim as my invention—

1. The combination, with the shoe A, having overhanging ledges I, of a series of bars, B, having parallel sides, journals C, projecting from the ends of said bars near their lower

edges and bearing in said shoe, and means for adjusting said bars, substantially as set forth.

2. The combination of the shoe A, bars B, located within the shoe, journals C, projecting from the extremities of said bars and bearing in said shoe, cranks D, secured to said journals, the bar E, to which said cranks are connected, having the projecting end F, and the slot G, curved as shown, and the set-screw H, all constructed and arranged to operate substantially as set forth.

FRIEDRICH WULFERT.

In presence of—
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