

No. 747,906.

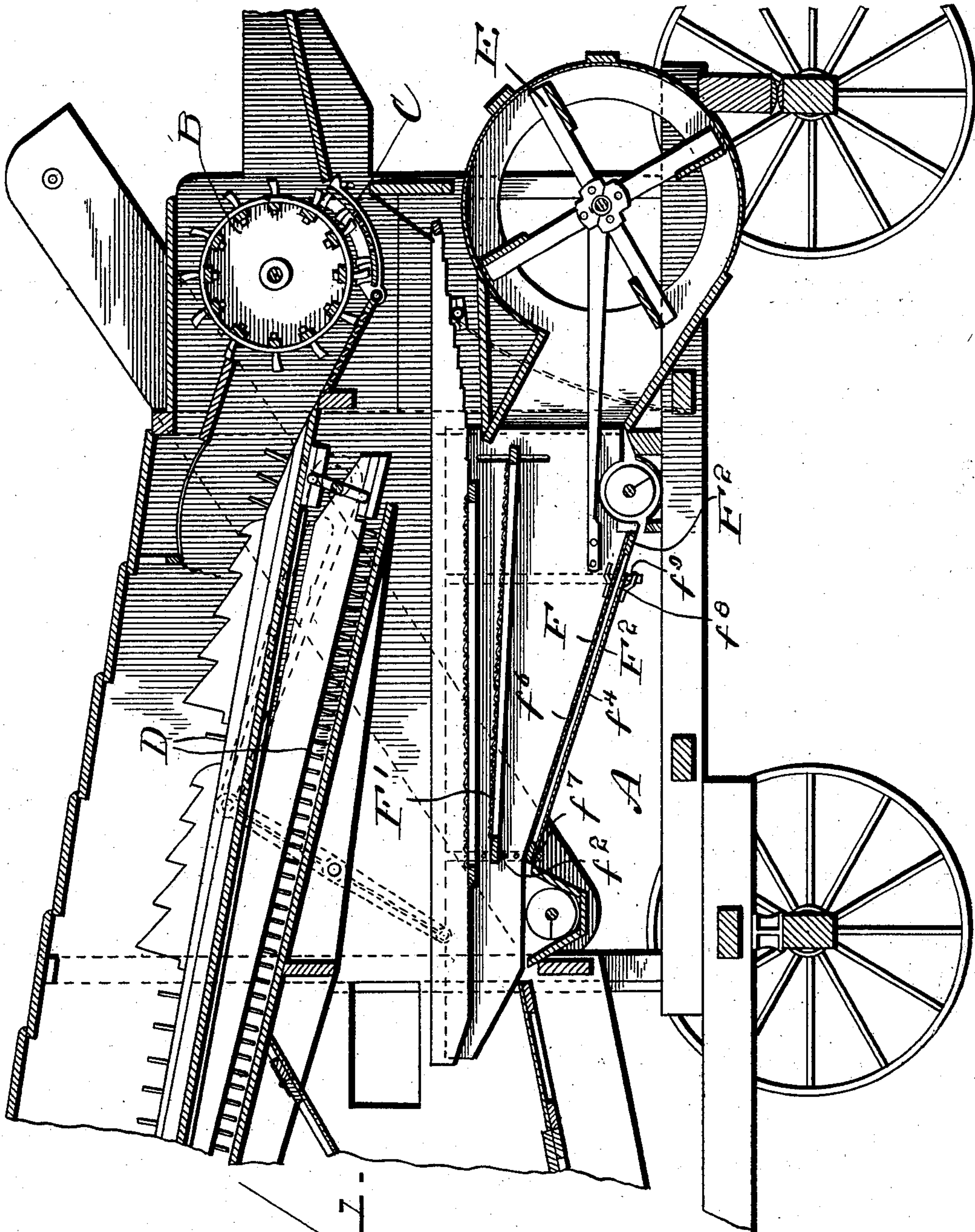
PATENTED DEC. 22, 1903.

W. W. DINGEE.  
THRESHING MACHINE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

*Wm. F. Doyle*  
*J. K. Moore*

INVENTOR

*William W. Dingee*

BY

*Whitaker Brewster* Attorneys

No. 747,906.

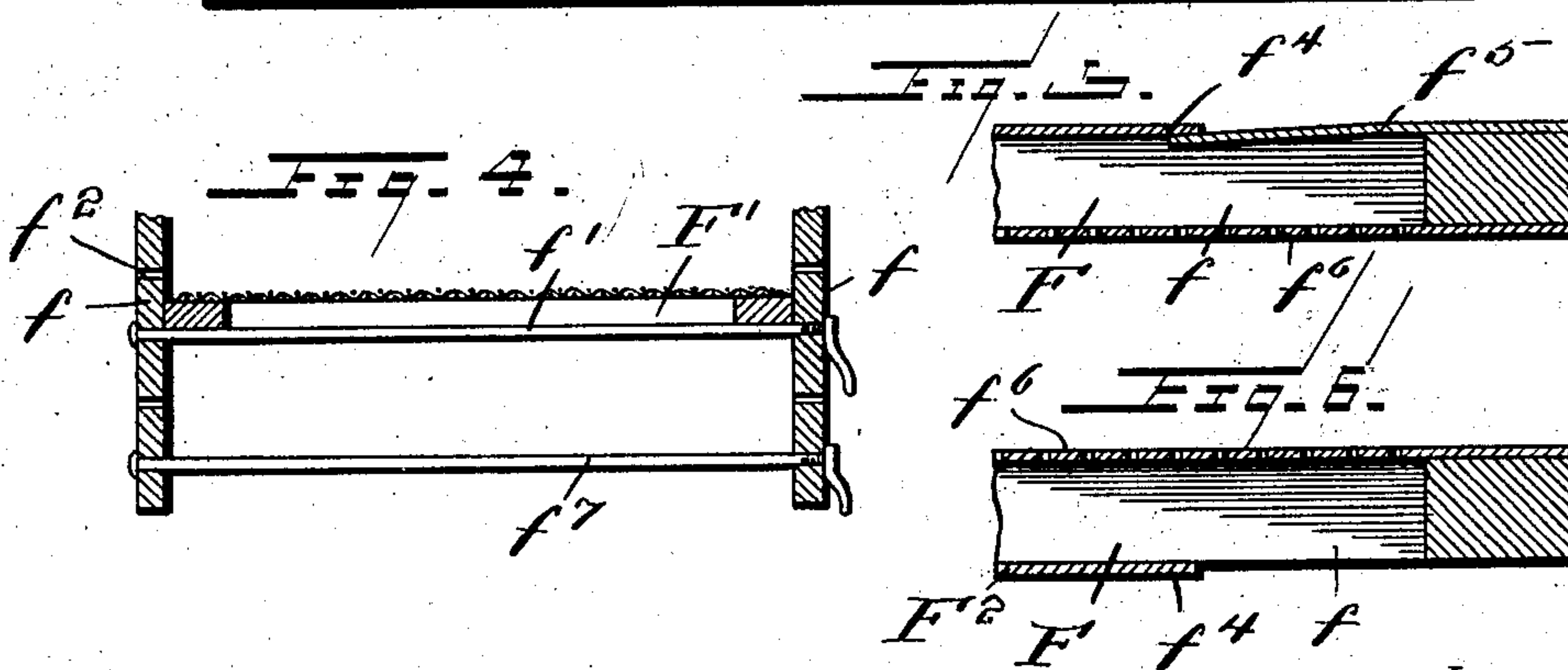
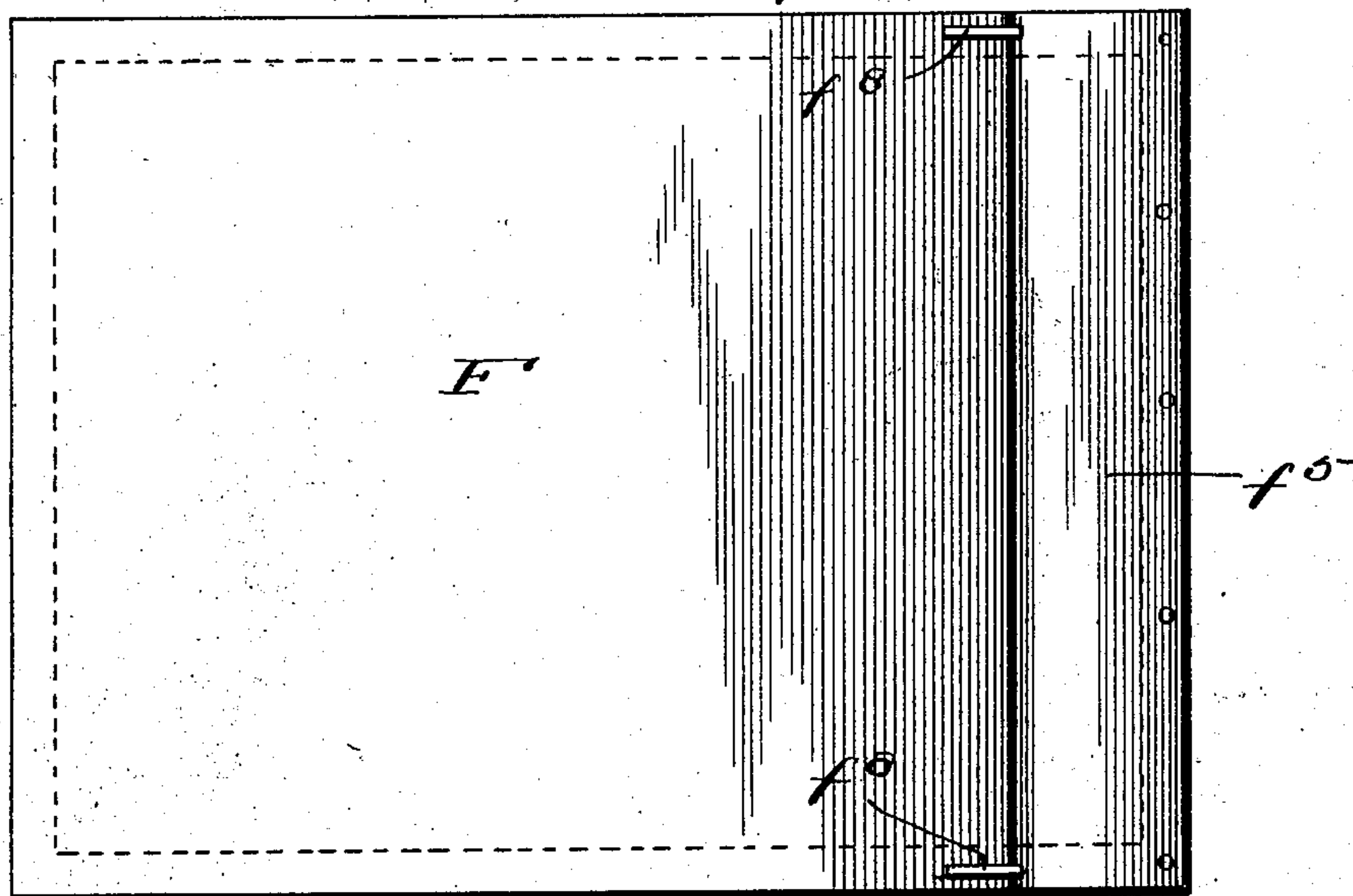
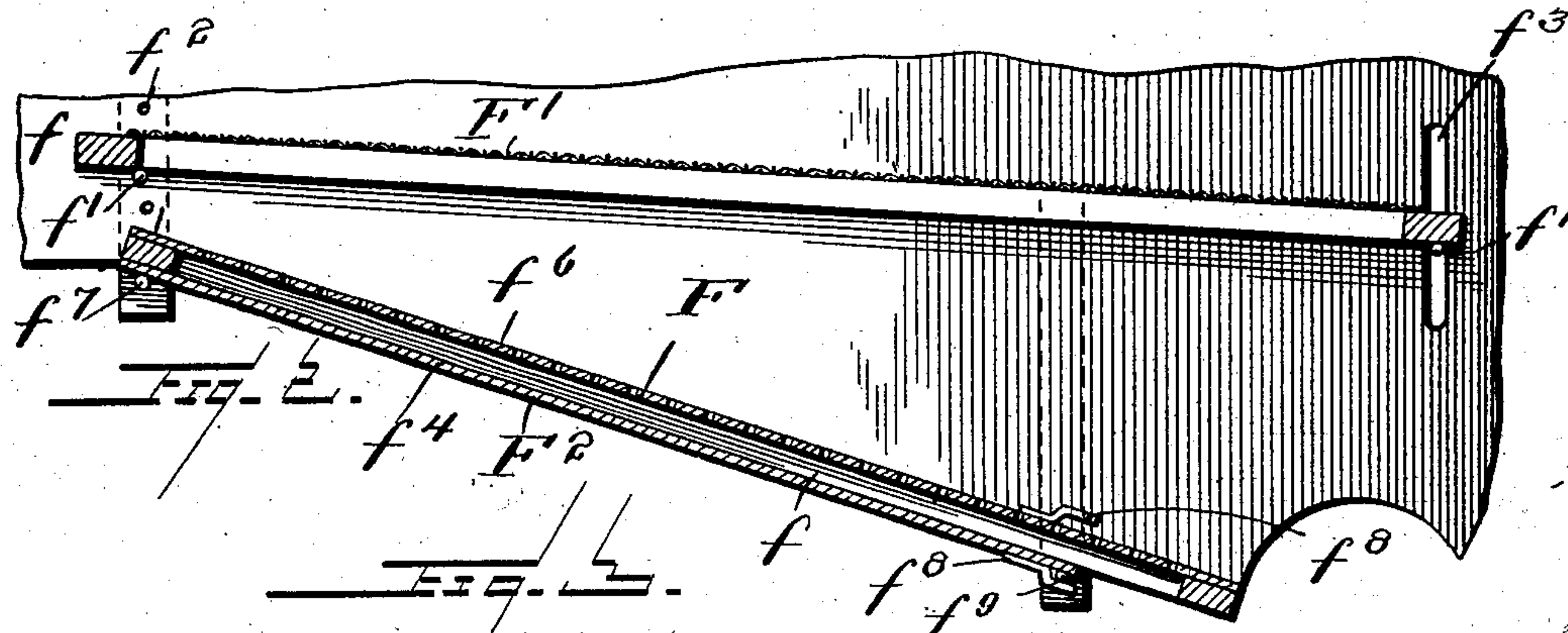
PATENTED DEC. 22, 1903.

W. W. DINGEE.  
THRESHING MACHINE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL.

2 SHEETS--SHEET 2.



*WITNESSES:*

Wm. F. Wayle.  
J. K. Moore

*INVENTOR*

William W. Dingler

By

Whitaker & Brown Attorneys



## UNITED STATES PATENT OFFICE.

WILLIAM W. DINGEE, OF RACINE, WISCONSIN.

## THRESHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 747,906, dated December 22, 1903.

Original application filed July 27, 1903, Serial No. 167,144. Divided and this application filed September 17, 1903. Serial No. 173,603. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. DINGEE, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Threshing-Machines; 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.

My invention consists in the novel features hereinafter described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention; and said invention is fully disclosed in the following description and claims.

This application is a division of my former application filed July 27, 1903, and given Serial No. 167,144.

In the said drawings, Figure 1 represents a partial vertical longitudinal section of a threshing-machine embodying my invention. Fig. 2 represents a partial view of the shoe, showing the combined shoe-bottom and screen in position and arranged to operate as a screen. Fig. 3 is a bottom plan view of the combined shoe-bottom and screen. Fig. 4 is a partial transverse vertical sectional view of the shoe, showing the means for holding the sieves and the combined shoe-bottom and screen therein. Figs. 5 and 6 are detail views of portions of the combined shoe-bottom and screen.

In the drawings, A represents the main frame or casing of a threshing-machine. B is the cylinder; C, the concave; D, the straw-carriers, consisting in this instance of walking-rakes, all of usual or any preferred construction, said parts forming no portion of my present invention.

E is the grain-cleaning fan, which is located, preferably, at the front end of the machine below the cylinder and concave, and F represents the shoe, which is of usual form and supported and provided with mechanism for imparting a reciprocating motion thereto in the usual manner. Between the side pieces *f* of the shoe are placed one or more

riddles or sieves, which are supported at each end upon the transverse rods *f' f'*, which extend through the sides of the shoe and are provided exteriorly of the shoe with a head at one end and a clamping wing-nut at the other end or with a clamping-nut at each end. The side pieces of the shoes are provided with means for permitting these clamping-rods *f'* to be raised and lowered for the purpose of adjusting the screen or sieves *F'*, which may consist of a vertical series of holes *f<sup>2</sup>* (indicated at the left in Fig. 4) or a vertical slot, as at *f<sup>3</sup>*, at the right of Fig. 4, either or both means being employed. When the sieves have been placed in their adjusted positions, resting upon the rods *f'*, the wing-nuts thereof are screwed up, so as to clamp the sieves tightly between the side pieces of the shoe and hold them firmly in their adjusted positions.

The shoe F is provided with a detachable bottom *F<sup>2</sup>*, which can be readily removed to permit the sieves to be taken out and replaced through the bottom of the shoe, thus facilitating the changing of the sieves in adapting the machine for use with various kinds of grain. This removable bottom preferably comprises a rectangular frame, to one side of which is secured an impervious bottom having a portion thereof removable. In the present instance I have shown one side of said frame provided with an impervious plate *f<sup>4</sup>*, of sheet metal, covering the main portion of the frame, and a detachable plate *f<sup>5</sup>*, covering the remaining portion of the frame and detachably secured thereto by means of screws, as shown, or otherwise. The other side of said frame is covered with wire-netting or a sheet of perforated metal, as shown at *f<sup>6</sup>*, forming a screen. The rear end of the shoe-bottom is supported by a transverse clamping-rod *f<sup>7</sup>*, extending through a hole in the sides of the shoe, said rod being provided with means for clamping the sides of the shoe together upon the removable bottom, as previously described in regard to the screen, and the removable bottom is provided adjacent to its forward end and on both sides with hook-shaped brackets *f<sup>8</sup>*, engaging a similar transverse clamping-rod *f<sup>9</sup>*, as clearly



shown in Fig. 4. These hooks or brackets  $f^8$ , as will be seen, are applied to the lower end of the shoe-bottom, and by placing the lower set of said brackets in engagement with the  
 5 rod  $f^9$  said bottom will be prevented from sliding downward upon said rod, thus holding the bottom in position while the clamping-rods are tightened upon it. When it is not desired to screen the grain, the shoe-bot-  
 10 tom is placed in the shoe with the impervious face upward and the detachable part thereof in operative position. When it is desired to screen the grain, it is only necessary to take out the shoe-bottom, remove the detach-  
 15 able plate  $f^5$ , and reinsert the said bottom with the screen  $f^6$  thereof uppermost, as shown in Fig. 4, when the grain will be screened and the foreign matter discharged through the bottom from the aperture formed  
 20 by the removal of the detachable plate  $f^5$ .

What I claim, and desire to secure by Letters Patent, is—

1. In a threshing-machine, the combination with the frame of the machine, of the shoe supported therein, said frame being open be-  
 25 low the shoe, a removable screen in said shoe, and a removable bottom for said shoe whereby said bottom may be removed to permit the removal or insertion of screens, substantially  
 30 as described.

2. In a threshing-machine, the combination with the frame of the machine, of the shoe supported therein, said frame being open be-  
 35 low the shoe, of a screen, supporting devices for said screen, secured to said shoe but permitting the shoe to be disengaged therefrom by endwise movements and a removable bottom for said shoe, whereby said bot-  
 tom may be removed to permit the removal

and insertion of screens, substantially as de- 40 scribed.

3. In a threshing-machine, the combination with the frame of the machine, of the shoe supported therein, said frame being open be-  
 45 low said shoe, of a screen in said shoe, supporting-rods for said screen extending through the side pieces of the shoe and engaging the screen adjacent to its ends, but not being connected to the screen, whereby  
 50 endwise movements of said screen will disengage it from said rods, clamping devices on said rods for drawing said side pieces of the shoe tightly upon the screen to prevent lon-  
 55 gitudinal movement thereof and a removable bottom for said shoe, substantially as de- scribed.

4. In a threshing-machine, the combination with a shoe, of a removable bottom provided with a screen on one side or face thereof and  
 60 having an impervious covering provided with a detachable portion on the other side thereof, substantially as described.

5. In a threshing-machine, the combination with a shoe, of a removable and reversible  
 65 bottom therefor provided on one side with a screen and on the other side with an impervious covering having a detachable portion, brackets secured to both sides of said bottom  
 70 and clamping-rods for securing said bottom to said shoe, one of said rods engaging said bracket, substantially as described.

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

WILLIAM W. DINGEE.

Witnesses:

E. E. RUSSELL,  
 WM. F. SAWYER.