H. T. SEBURN.

THRESHING MACHINE.

APPLICATION FILED SEPT. 7, 1909. RENEWED SEPT. 23, 1911.

1,019,194.

Patented Mar. 5, 1912.

3 SHEETS—SHEET 1.

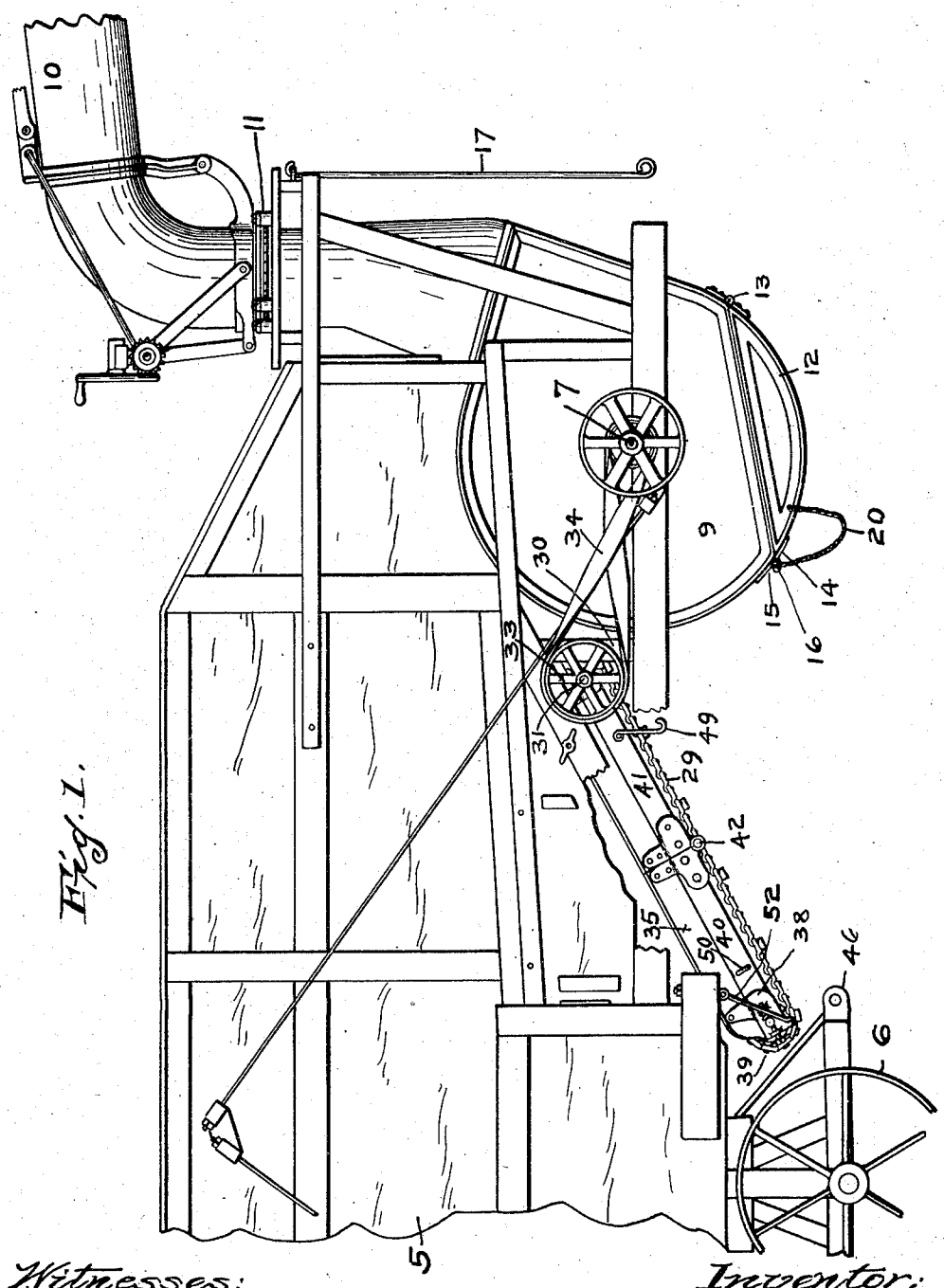

Fig. 1.

Witnesses;
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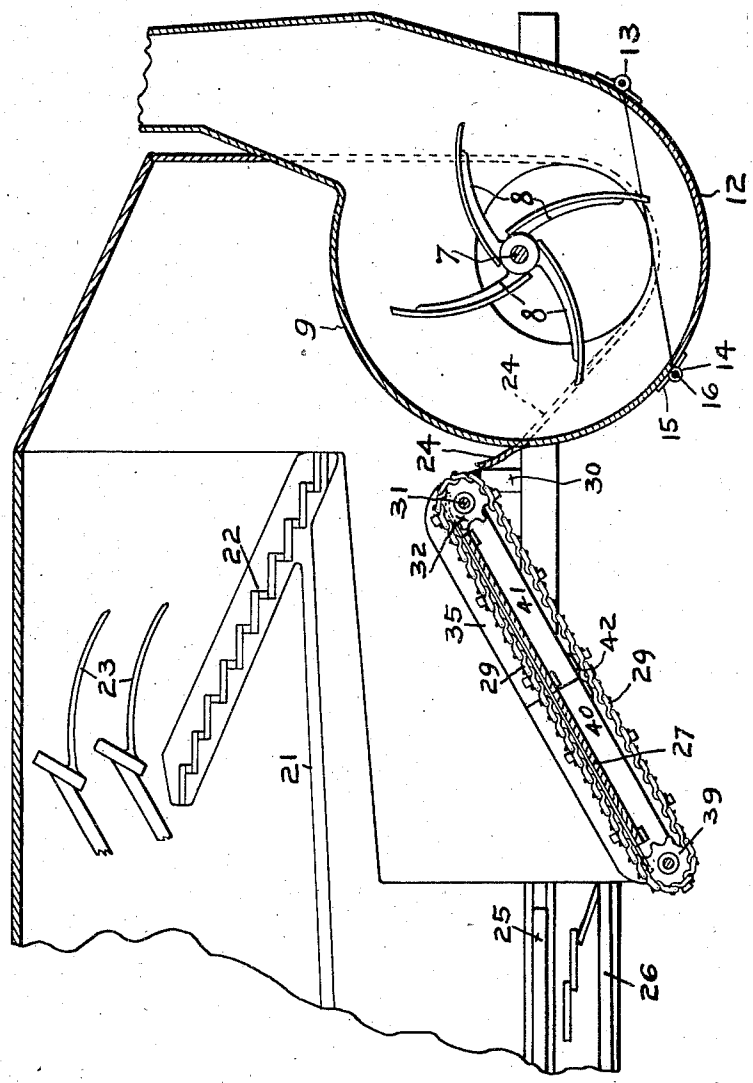
3 SHEETS—SHEET 2.

Fig. 2.



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3 SHEETS—SHEET 3.

Fig. 3.

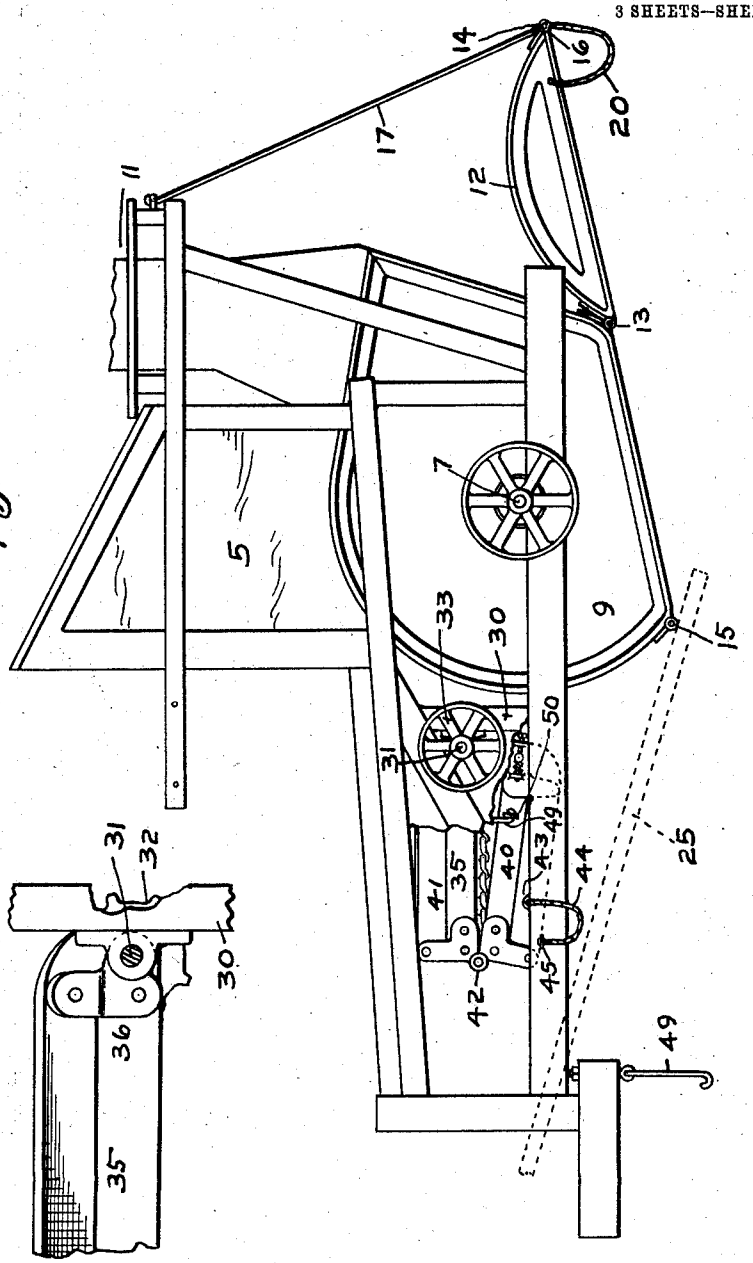

Fig. 4.

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UNITED STATES PATENT OFFICE.

HARVEY T. SEBURN, OF INDIANAPOLIS, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE INDIANA MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF WEST VIRGINIA.

THRESHING-MACHINE.

1,019,194. Specification of Letters Patent. **Patented Mar. 5, 1912.**

Application filed September 7, 1909, Serial No. 516,368. Renewed September 23, 1911. Serial No. 650,991.

To all whom it may concern:

Be it known that I, Harvey T. Seburn, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Threshing-Machines, of which the following is a specification.

This invention relates to improvements in threshing machines which are equipped with a pneumatic stacker, and in which the traction power to haul the machine from place to place is attached to the stacker end of the machine.

In a machine of the above character it is necessary to mount the blower and its case close to the ground, and to provide means for conveying the short straw or cavings and the chaff from the cavings riddle and chaff-shoe to the blower-hopper. This conveying mechanism and the low-lying blower-case present obstructions to the removal of the cavings-riddle, which removal is frequently necessary for the purpose of cleaning it, and they also interfere with the attachment of the traction power.

The object of this invention is to provide a blower-case and a chaff and cavings conveyer in hinged sections which will enable the obstructing parts to be moved out of the way.

I accomplish the objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a side view of the stacker end of the machine, with parts broken away, and Fig. 2 is a longitudinal vertical section of the same end of the machine. Fig. 3 is a detail in side elevation of the same part of the machine with the parts of my invention which are adapted to be folded shown in their folded positions, and Fig. 4 is a detail in side elevation of a portion of the cavings and chaff carrier.

Like characters of reference indicate like parts throughout the several views of the drawings.

Referring to the drawings, 5 represents the sides of a threshing machine, 6 the front ground-wheels, 7 the blower shaft, 8 the blower arms mounted on said shaft, 9 the main upper portion of the blower casing and 10 the stacker tube or chute. The chute 10 is mounted on a turn-table 11 which permits of lateral movement of the chute in the usual manner. All of the above parts are of usual and well known construction with the exception of the blower casing. In my construction, the blower casing has a bottom 12 which is separate from the major upper part 9, and said bottom is connected by hinges 13 with the main upper part 9 of the casing. The lower member 12 is provided with a loop or eye 14 (see Fig. 3) which registers, when the section is closed, with a corresponding loop or eye 15 on the upper member of the casing, and a pin 16 passes through eyes 14 and 15 and locks the two sections together in the closed position shown in Figs. 1 and 2.

When it is desired to open the blower case the lower section is swung forwardly and then upwardly which operation will shorten the downward extension of the blower-casing for purposes which will be hereinafter described. The pin 16 is withdrawn to permit the section 12 to swing into the position just described which is that illustrated in Fig. 3.

A rod 17 here shown as hinged at its upper end to the turn-table platform, has an eye at its lower end which is brought into register with the eye 14 of section 12, in the open position of the latter shown in Fig. 3, and the section is fastened to the rod by passing the pin 16 through the eyes to hold the section and the rod. The pin is preferably secured to section 12 by a chain 20 to keep it from being lost.

21 represents a grain-floor, 22 is a shaker-extension, which latter is located obliquely above said grain-floor.

23 are fingers to feed the straw to the shaker-extension. The shaker-extension discharges into the blower hopper 24.

25 is a cavings-riddle located below the grain-floor 21, and below the cavings-riddle is a shoe 26. The cavings-riddle 25 and shoe

obliquely discharges into the stacker-hopper 24. The chaff from shoe 26 and short straw or cavings from riddle 25, deposited upon the floor 27, are forced to move upwardly of the floor by a series of slats 28 which are made to travel continuously from bottom to top of floor 27. This is accomplished by link-belts 29, to which the slats are fastened, and I will now describe the details of this mechanism.

30 are vertical posts forming part of the machine frame, and 31 is a transverse shaft supported from posts 30 by suitable brackets. Mounted on the shaft 31 are sprocket wheels 32 around which link-belts 29 are made to pass. The shaft 31 has the pulley 33 which is connected by belt 34 (see Fig. 1) with a belt pulley on shaft 7, and by this means the shaft 31 is revolubly driven.

The floor 27 has the sides 35 with top plates 36 fastened thereto. The plates have suitable holes through which shaft 31 is passed, whereby the said sides and floor will be swingingly supported or hinged on shaft 31. At the lower ends of sides 35 are plates 38 in which are mounted sprocket wheels 39.

The sprocket-wheels 32 are connected with sprockets 39 by the link-belts 29.

The sides 35 project above the floor 27 to retain the cavings and chaff upon the floor. The sides 35 and floor 27 are in two transversely divided sections 40 and 41 which sections are united by hinges 42 which permit the lower section 40 to fold under the upper section 41 in the manner illustrated in Fig. 3 and they are retained in such folded position by a pin 45 which is connected by chain 44 to staple 43. The pin is inserted through a hole in the frame of the machine with its inner end under the side 35 of the lower folded section 40 when this and the section 41 are pushed up for the purpose of swinging them around shaft 7 and they are held in raised position by said pin 45.

46 is an axle-extension to which a pole or other draft and steering means is attached. The customary motive power for transporting machines in which my above described invention is used is ox-teams or a traction engine and the folding up of the cavings and chaff conveyer and bottom of blower casing are essential for the attachment and operation of the traction power at the stacker end of the machine.

The folding out of the way of the lower member of the blower casing and of the cavings and chaff carrier are also necessary to allow the withdrawal from the machine of the cavings riddle 25, as shown by dotted lines in Fig. 3 for the purpose of cleaning said riddle.

A hook 49 carried by the upper section 41 is hooked into the eye 50 on section 40 when the two sections are folded. A hook 52 supported by the frame of the machine aids in supporting the floor 27 when the floor is in operative position.

Having thus fully described my invention, what I claim as new and wish to secure by Letters Patent, is—

1. In a threshing machine, a cavings-riddle adapted to be slid longitudinally in and out of the machine and a movable carrier normally in the path of said riddle adapted to be moved out of said path.

2. In a threshing machine, a cavings-riddle adapted to be slid longitudinally in and out of the machine, a carrier in the path of said riddle said carrier being constructed in sections whereby it is adapted to be folded out of the path of the riddle.

3. In a threshing machine, a cavings-riddle adapted to be slid longitudinally in and out of the machine, a revoluble shaft, and a carrier in the path of said riddle swingingly mounted on said shaft whereby it may be moved out of the path of the riddle.

4. In a threshing machine, a cavings-riddle adapted to be slid longitudinally in and out of the machine, a revoluble shaft, and a carrier in the path of said riddle swingingly mounted on said shaft, said carrier being in a plurality of sections which are hinged together to permit folding.

5. In a threshing machine having a pneumatic stacker and a blower, the combination therewith of a cavings-riddle adapted to be slid longitudinally in and out of the machine, a blower casing the lower part of which is in the path of said riddle, said lower part being separable from the upper part, whereby it may be moved out of the path of the riddle and a carrier communicating with said riddle and said blower for conveying material to the latter from said riddle.

6. In a threshing machine having a pneumatic stacker and a blower, the combination therewith of a cavings riddle adapted to be slid longitudinally in and out of the machine, a blower casing the lower part of which is in the path of said riddle said lower part being separable from the upper part whereby it may be moved out of the path of the riddle, and a movable carrier normally in the path of said riddle and communicating therewith and with said blower and adapted to be moved out of said path.

7. The combination with a threshing machine having a cavings riddle and a shaker above and extending beyond the rear end of said riddle, of a pneumatic stacker secured to said machine comprising a hopper extending transversely thereof and a separable fan-casing communicating with said hopper, and an adjustable carrier communicat-

ing with said riddle and said hopper adapted to be moved from the path of said riddle to permit its withdrawal from the machine and adjusted in relation to said riddle to convey material therefrom into said hopper.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this, 31st day of August, A. D. one thousand nine hundred and nine.

HARVEY T. SEBURN. [L. S.]

Witnesses:
J. A. MINTURN,
EDITH E. MILLER.