(No Model.)

C. W. BENHAM.

FEEDER FOR THRASHING MACHINES.

No. 335,988. Patented Feb. 9, 1886.

Fig. 1.

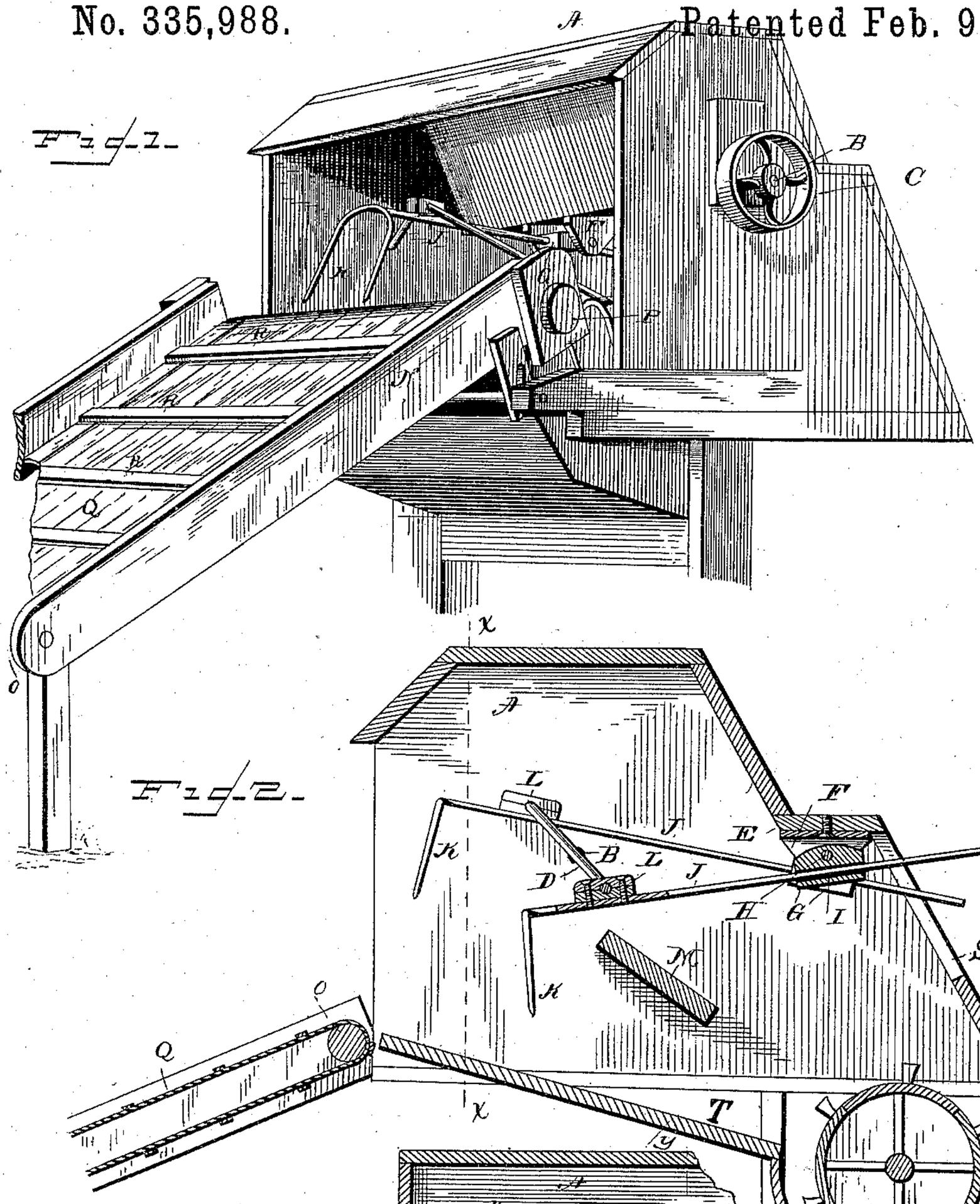
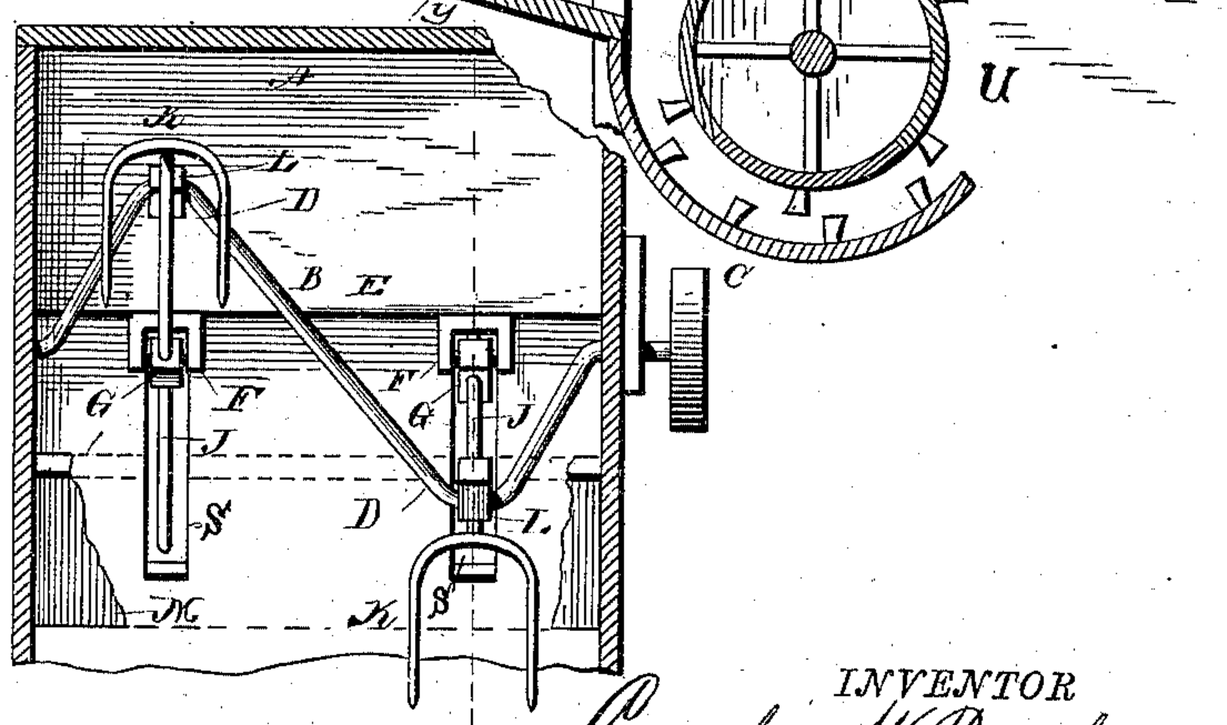


Fig. 2.

Fig. 3.



WITNESSES

F. L. Ourand.

Edward Stanton.

INVENTOR

Cornelius W. Benham

By Louis Bagger & Co

Attorneys.

UNITED STATES PATENT OFFICE.

CORNELIUS W. BENHAM, OF ENTERPRISE, KANSAS, ASSIGNOR OF ONE-HALF TO WILLIAM E. FANSON, OF SAME PLACE.

FEEDER FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 335,988, dated February 9, 1886.

Application filed October 24, 1885. Serial No. 180,816. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS W. BENHAM, a citizen of the United States, and a resident of Enterprise, in the county of Dickinson and State of Kansas, have invented certain new and useful Improvements in Feeders for Thrashing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the front end of a thrashing-machine to which my improved feed mechanism has been applied. Fig. 2 is a longitudinal vertical sectional view of the same, and Fig. 3 is a vertical transverse sectional view of the same.

The same letters refer to the same parts in all the figures.

This invention relates to feeding devices for thrashing-machines; and it has for its object to provide a device of this class which shall be simple and inexpensive in construction, efficient in operation, and which may be readily applied or adapted to thrashing-machines of any ordinary well-known construction, so as to dispense with the necessity of attendants to feed the grain under the cylinder of the machine.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A designates a hood or casing, which is mounted upon the front end of the thrashing-machine, over the inclined feed-board T and cylinder U of the same, and the sides of which are provided above the feed-board with boxes or bearings for the ends of a transverse shaft, B, one of the projecting ends of which is provided with a pulley or band-wheel, C, through which it may receive motion by means of an ordinary belt or band from a pulley upon the end of the cylinder-shaft of the machine. The top of the hood or casing is so constructed as to give ample room for the operation of a series of cranks, D D, formed upon the shaft B. The under side of the cover E of the hood or casing A is provided near its rear end, and nearly over the cylinder U, with downwardly-extending lugs or ears F F, between which blocks or boxes G G are hinged or pivoted upon transverse pins H H. The said blocks or boxes are provided with longitudinal perforations I, for the passage of the longitudinally-sliding rods J J, the front ends of which are provided with forks K, the tines of which are turned downwardly, as shown, and the rear ends project through the vertical slots S in the rear wall of the hood. The rods or handles J are provided with boxes or blocks L, suitably bolted or otherwise attached thereto and journaled in the rear of the forks upon the cranks D of the shaft B. It will be seen that by the operation of the said shaft in the proper direction the forks will be moved upwardly, forwardly, downwardly, and rearwardly, by which motion they are caused to take the grain, which is supplied to the said forks as will be presently described, and feed it to the cylinder of the thrashing-machine.

Secured between the sides of the hood or casing A, some distance below and in rear of the crank-shaft B, above the feed-board T, is a downwardly and rearwardly inclined deflecting-board M, which serves to prevent the grain from becoming entangled with the crank-shaft or with the forks, and also to guide it toward the cylinder of the thrashing-machine and underneath the same.

N designates a rectangular frame, the upper end of which is suitably hinged or otherwise attached to the frame of the thrashing-machine, near the front end of the same, and the lower end of which may be provided with suitable supports, whereby it shall be slightly raised above the ground. Said frame is provided at or near its upper and lower ends with bearings for a pair of transverse shafts, O O, over which runs an endless apron, Q, provided with cross-slats R, and to which motion may be imparted through the pulley P in any suitable manner from the driving-gear of the thrashing-machine.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed, without requiring any extended ex-

planation. The grain which is to be fed to the thrashing-machine is placed upon the endless apron Q, which conveys it up to the throat of the thrashing-machine, and dumps it upon the feed-board of the latter. At this point the grain is caught by the forks K, which serve to rake it under the deflecting-board M toward the cylinder, and force it under the same. The grain will in this manner be fed evenly and steadily, and without danger of choking, while the severe and dangerous labor of one or more hands for feeding the machine may be wholly dispensed with.

I am aware that it is not new to construct feeding devices for thrashing-machines, consisting of a series of forks or hooks operated by means of a crank-shaft, and I do not claim such construction broadly; but

I claim and desire to secure by Letters Patent of the United States—

1. The combination of the thrashing-cylinder, an inclined feed-board, a hood, the rear portion of which has vertical slots, a crank-shaft journaled in the hood over the feed-board, downwardly-extending lugs secured inside of said hood, nearly over the cylinder, and tubular blocks pivoted in said lugs, and rods carrying forks K at their front ends and secured to said crank-shaft near one end, and with their rear portions passing through said blocks and vertical slots, as shown and described.

2. The combination of the thrashing-cylinder, the inclined feed-board, the hood, a crank-shaft journaled in the forward part of said hood, downwardly-projecting lugs having tubular blocks secured inside of said hood, nearly over the cylinder, rods having forks at their front ends and secured to said crank-shaft and sliding in said blocks, and a downwardly and rearwardly inclined deflecting-board secured within said hood below and in the rear of said crank-shaft, as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CORNELIUS W. BENHAM.

Witnesses:

CHARLES LEWIS,

J. H. SLEMMER.