2 Sheets—Sheet 1.

D. C. BAUGHMAN.

THRESHING MACHINE.

No. 103,832. Patented June 7, 1870.

Fig. 1.

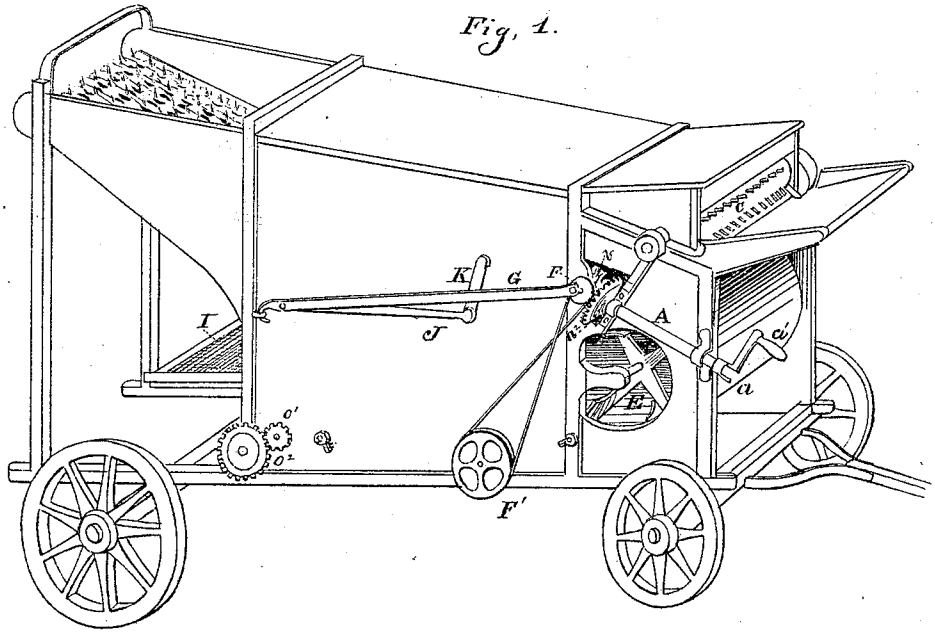
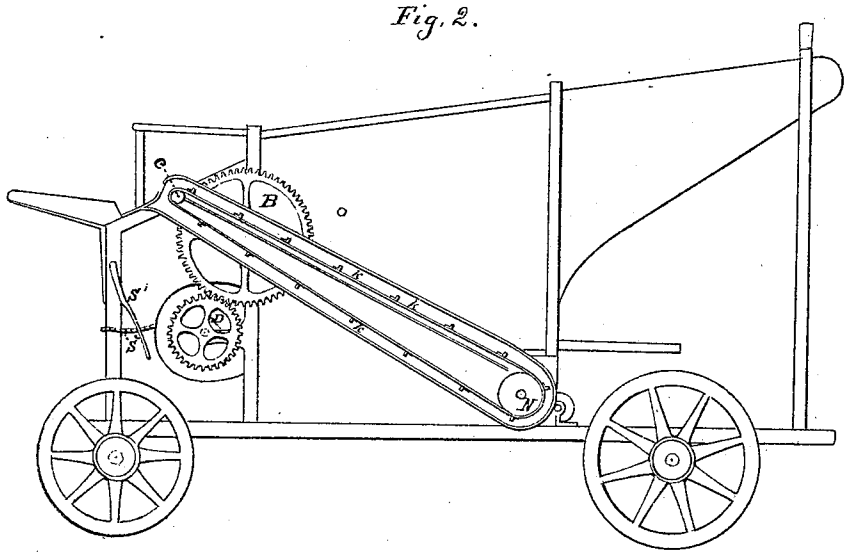


Fig. 2.



Witnesses,
J. W. Mester
H. A. Daniels

D. C. Baughman Inventor,
by Chas. Dickey Whitman
Washington
D. C.

2 Sheets—Sheet 2.

D. C. BAUGHMAN.

THRESHING MACHINE.

No. 103,832. Patented June 7, 1870.

Fig. 3.

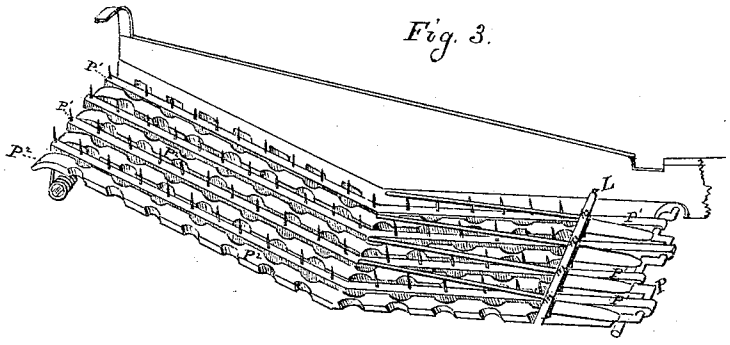


Fig. 4.

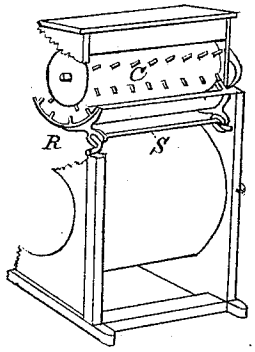
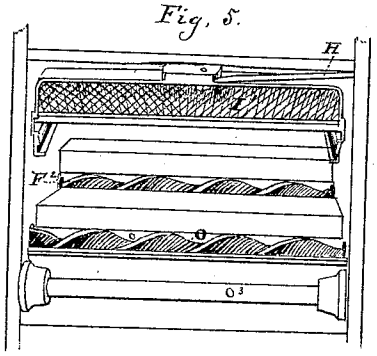


Fig. 5.



Witnesses,
J. H. Hester
H. A. Daniels

D. C. Baughman Inventor,
by Ch. Sidney Whitman
Atty

United States Patent Office.

DAVID C. BAUGHMAN, OF TIFFIN, OHIO.

Letters Patent No. 103,832, *dated June* 7, 1870.

IMPROVEMENT IN THRASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, DAVID C. BAUGHMAN, of Tiffin, in the county of Seneca and in the State of Ohio, have invented a new and useful Improvement in Thrashing-Machines; and do hereby declare that the following description, taken in connection with the accompanying drawing, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

My invention relates to machines made use of for thrashing wheat, clover, or corn; and

Its nature consists in certain modifications in the details of the same, and a novel construction and arrangement of the component parts thereof, by means of which difficulties which have heretofore attended the use of thrashing-machines are obviated, and the various devices composing the machine made to operate automatically and harmoniously.

In the accompanying drawing, which illustrates my invention and forms a part of the specification thereof, and in which corresponding parts are represented by similar letters—

Figure 1 is a view, in perspective, of the machine, illustrating the arrangement of the devices on that side thereof, to which the tumbling-rod is attached.

Figure 2 is a side elevation of the opposite side of the machine.

Figure 3 is a detached view of the rakes or carriers and pronged platform.

Figure 4 represents the cylinder and concave, with the device made use of for raising and lowering the same.

Figure 5 is a detached view from the rear of the machine.

The machine is constructed and the component parts thereof relatively arranged as follows:

The tumbling-shaft A has its bearings attached to the side of the machine, and one end thereof is provided with the coupling-box *a* and crank a^1, to either of which devices the power driving the machine may be applied.

To the other end of the said rod is keyed, or otherwise secured, the bevel-wheel a^2, which gears into a corresponding bevel-wheel, *b*, attached to shaft passing transversely through the machine and having its bearings in the sides thereof.

To this shaft is secured the spur-gear B, which engages with a pinion on the shaft of the cylinder, and rotates the same.

The spur-wheel B also gears into the wheel D, which imparts rotary motion to the fan E, to the axis-shaft of which it is secured. The said fan is constructed in such a manner that it may be either keyed to the said axis-shaft and made to revolve with it, or made to rest loosely thereon, and remain stationary when the machine is in motion.

To one end of the main shaft, which operates the devices aforesaid, is secured the pulley F, which is connected, by means of a cross-belt, with the pulley F^1, and thereby rotates the grain-auger F^2.

One end of the pitman G is attached to the pulley F, by means of a crank-pin, and the other end thereof with the lever H, operating the riddles I and I′, thereby causing reciprocatory motion to be imparted thereto.

The pitman G is also connected, by means of the connecting-rod J and crank K, with the shaft L, to which are secured the rods *m*, thereby imparting vibratory motion to the said rods.

Upon one end of the shaft of the cylinder C is the pulley *c*, which is connected, by an open belt, with another pulley, N, which rotates the "tail-end" auger O, turning in the groove *o*.

On the opposite end of the shaft of the said auger is secured the pinion o^1, which gears into the spur-wheel o^2 upon the shaft o^3, which operates the stacker.

Upon the open or elevator belt, aforesaid, are secured the angular carriers *k*, which return the "tail ends" to the separator.

An auxiliary long riddle, I, is provided, which slides in ways, prepared for its reception, beneath the riddle I′. The said auxiliary riddle is made use of when clover-seed is to be cleaned.

The main driving-shaft is provided with the alternating double cranks P, which operate the rakes or straw-carriers P^1. The said carriers are obtuse angled in form, and are provided with teeth to seize upon the straw. By the revolution of the main shaft, an alternating longitudinal motion is imparted to them, by means of which the straw is raked backward from the fingered platform, upon which it has been shaken, as hereinbefore described.

Between the said carriers are the obtuse angled bars P^2, which are coincidental with the said carriers, and are provided with semicircular apertures, through which the grain falls upon the riddles.

The rear ends of the carriers are attached, by means of connecting-wires or hinges, with a transverse bar, in such a manner as to allow them to operate as aforesaid.

The concave R is raised or lowered by means of the double crank S, which has its bearings in the sides of the frame, and is operated by the spring-handle S^1, working in the rack S^2.

The machine may be transformed into a clover-huller by removing the cylinder-box and concave, and substituting in lieu thereof the clover-hulling cylinder and concave T.

It may be also made to thrash corn, by securing the corn-thrasher T' in the place of the original cylinder.

Those parts of the machine which are similar, in general construction and operation, to those heretofore in use, it is not deemed necessary to describe more fully, and the operation of the devices described will be understood by the foregoing description of the construction thereof.

Having thus described the construction, operation, and relative arrangement of the component parts of my invention, I will indicate what I claim as new and desire to secure by Letters Patent in the following clauses:

1. The arrangement of the cylinder C and fan-wheel E, with relation to each other, as herein shown, with the gearing D B, so that they are made to operate together, in the manner and for the purpose set forth.

2. The pulley F, upon the end of the crank-shaft P, pitman G, lever H, connecting-rod J, crank K, shaft L, and pulley F^1, when combined and operating together, as and for the purposes described.

3. The shaft o^3, by means of which the straw-stacker is operated, spur-gears O^1 and O^2, auger O, pulley N, carriers *k*, and pulley C, upon the end of the main shaft, when arranged and operating together, as described.

4. In combination with the adjustable concave R, the double crank S, provided with the handle S^1, working in the stop-rack S^2, arranged and operating together as described.

5. The arrangement of the tumbling-rod A, in combination with the main shaft P, provided with alternate cranks, angular carriers or rakes P^1, and shaft L, provided with lifting-fingers, when jointly operating together as described.

In testimony that I claim the foregoing, I have hereunto set my hand, this day of , 1869.

D. O. BAUGHMAN.

Witnesses:

D. M. BURRIER,

A. H. ARNOLD.