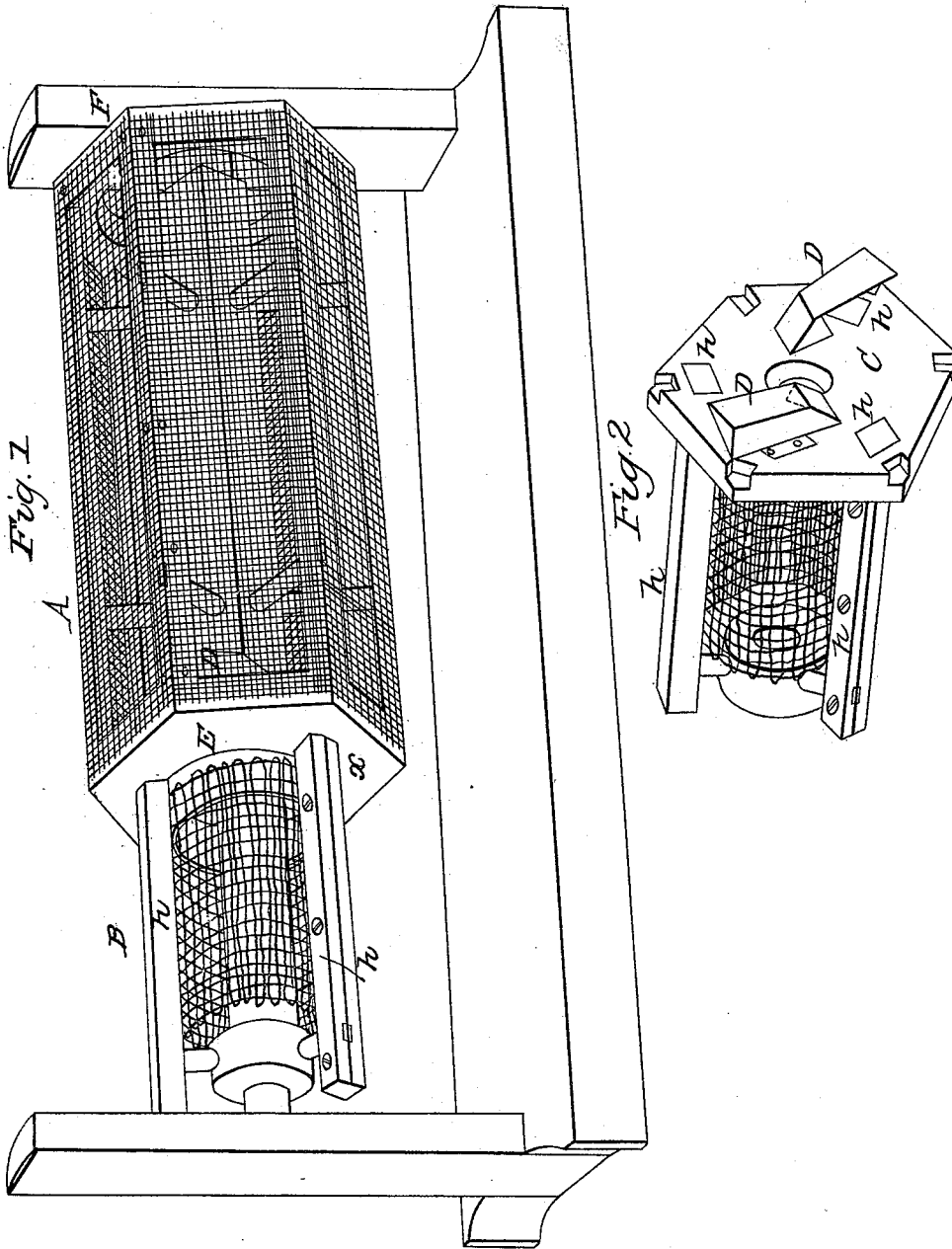


Grain Winnower.

No. 7,744.

Patented Oct. 29, 1850.



UNITED STATES PATENT OFFICE.

DAN PEASE, JR., OF FLOYD, NEW YORK.

ROTARY GRAIN-SCREEN.

Specification of Letters Patent No. 7,744, dated October 29, 1850.

To all whom it may concern:

Be it known that I, DAN PEASE, JR., of Floyd, in the county of Oneida and State of New York, have invented a new and useful

5 Improvement in Rolling Screens.

I will first mention the difficulty attending the operation of the rolling screen made in the usual way in order to show more clearly the remedial improvement. The diameter
10 being the same all the way from one end to the other when it revolves with a motion that is right for the fine part of the screen it is much too fast for the coarse part, the bits of straw and other stuff that has more
15 length than breadth that are intended to pass out at the end of the screen will be tumbled along or lifted up and fall endwise through the meshes of the wirecloth with the wheat, and to remedy this evil my improvement consists in the following mode of
20 construction: I make the fine part of the screen in the usual way and make the coarse part much less in diameter to reduce the motion as much as I conveniently can. At
25 the end of the fine part of the screen I put in a head made of board that just fills it. To this head the coarse part of the screen is attached, and by means of conductors being attached to the opposite side of the head the
30 grain (as the screen rolls) is brought from the fine part of the screen through the head into the coarse part which is much less in diameter and is made round and smooth inside so as not to lift anything that is in it
35 as it revolves allowing bits of straw, &c., to remain as flat as possible on the bottom until they pass out at the end of the screen, it being set inclining for that purpose.

The description is as follows, reference being had to the annexed drawings of the same making part of this specification.

Figure 1 is a perspective view of the screen. Fig. 2 is a view of the head with the conductors and coarse part of the screen
45 attached to it it being detached from the fine part thereof.

The same letters refer to like parts.

A is the fine part of the screen.

B is the coarse part.

50 C is the head that fills the end of the fine part of the screen with the conductors attached to one side and the coarse screen to

the other. When put together the conductors come inside of the fine screen.

D is the conductors. They are made of 55 thin sheet-iron and nailed to the head. The sheet iron is so bent at angles as to have one part lie flat on the head for the purpose of nailing it thereto and then forming two sides to a conductor, the head being another, 60 and one side is open. The open side goes forward as the screen revolves. They dip the grain at the bottom or when the outward end of the conductor is downward and as it revolves so that the outward end is the 65 highest the grain slides toward the center of the head (though not in a direct line to the center for the conductors are so put onto the head that the outward end stands forward of the inner end to make the grain 70 slide with more east) where there is a hole through it at the end of each conductor through which the grain is directed into the coarse part of the screen which is attached to the other side of the head. The conduc- 75 tors at the inner end turn with an angle toward the head and a part of that end comes into the hole to direct the grain through the head.

E is a piece of sheet-iron bent around the 80 same size as the coarse part of the screen which the grain first falls onto as it comes from the conductors. This is to prevent bits of straws, &c., from pitching endwise through the meshes of the screen which it 85 would do if the wire cloth was in place of the sheet iron.

F is the ribs that support the sheet iron and wire cloth. One end is connected to the head and the other end is connected by small 90 arms or spokes to the shaft beyond the end of the wire cloth. These ribs are outside of the wire cloth, so as to leave the inside smooth and round.

The grain enters the screen at F and by its 95 inclined position and rolling motion the grain is carried toward the other end where the conductors (as they revolve with the screen) dip it up and direct it into the coarse part, where it first falls onto the sheet 100 iron and works gently off onto the wire cloth the straws, &c., lying mostly in a horizontal position and that part of the screen having but little motion allows the grain to

fall through and the straws, &c., to pass out at the end.

I claim—

5 The construction of a rolling screen consisting of a large and fine, and small and coarse part in combination with conductors D, to carry the grain from the large to the

small part for the above mentioned purpose and substantially as above described.

DAN PEASE, JR.

Witnesses:

ANSON LITTLE,
ALEXANDER COBURN.