

D. Pease.

Buckwheat Cleaner.

Nº 6,271.

Patented Apr. 3, 1849.

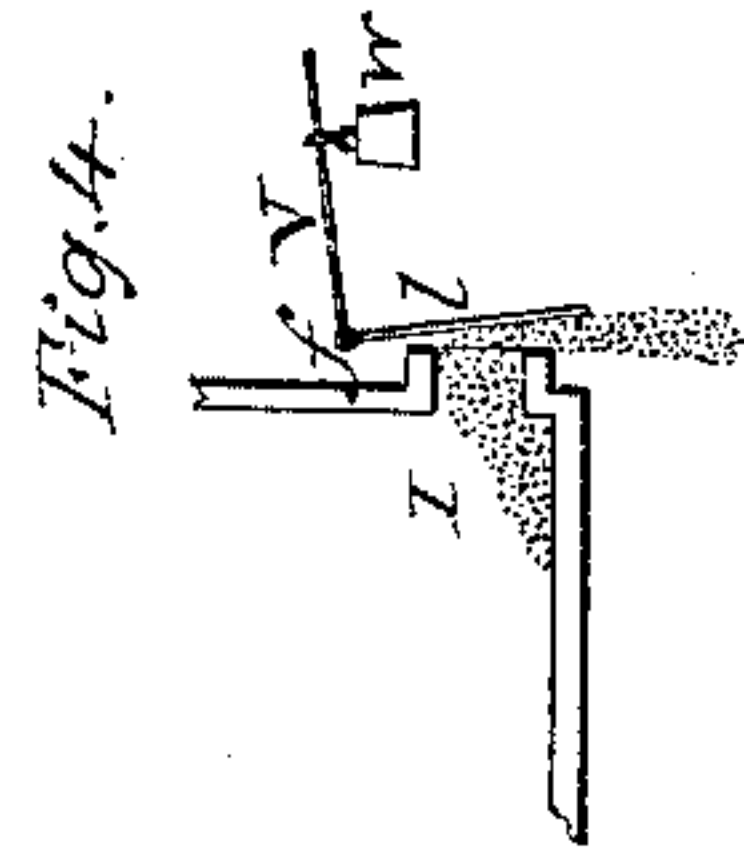
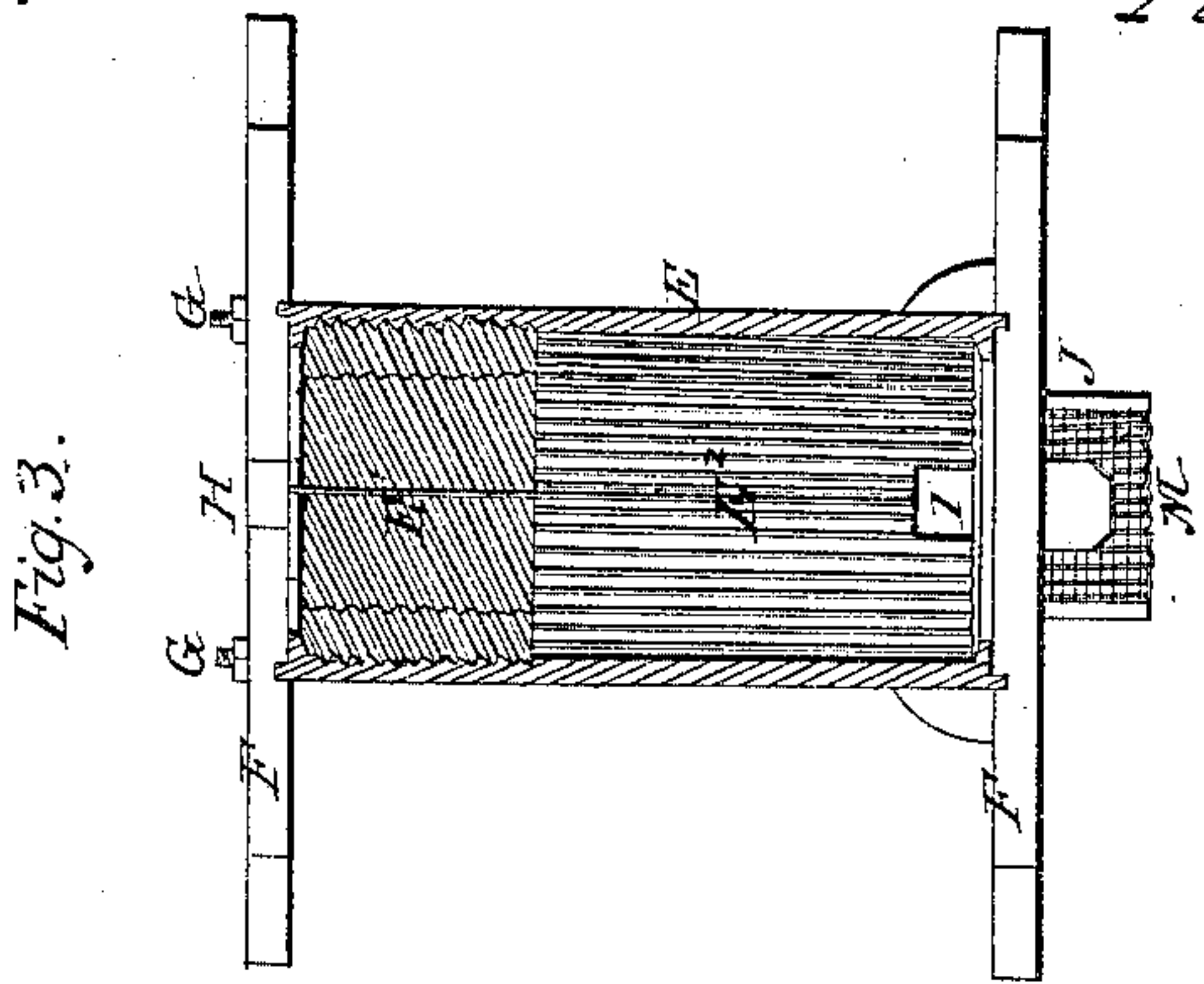


Fig. 2.

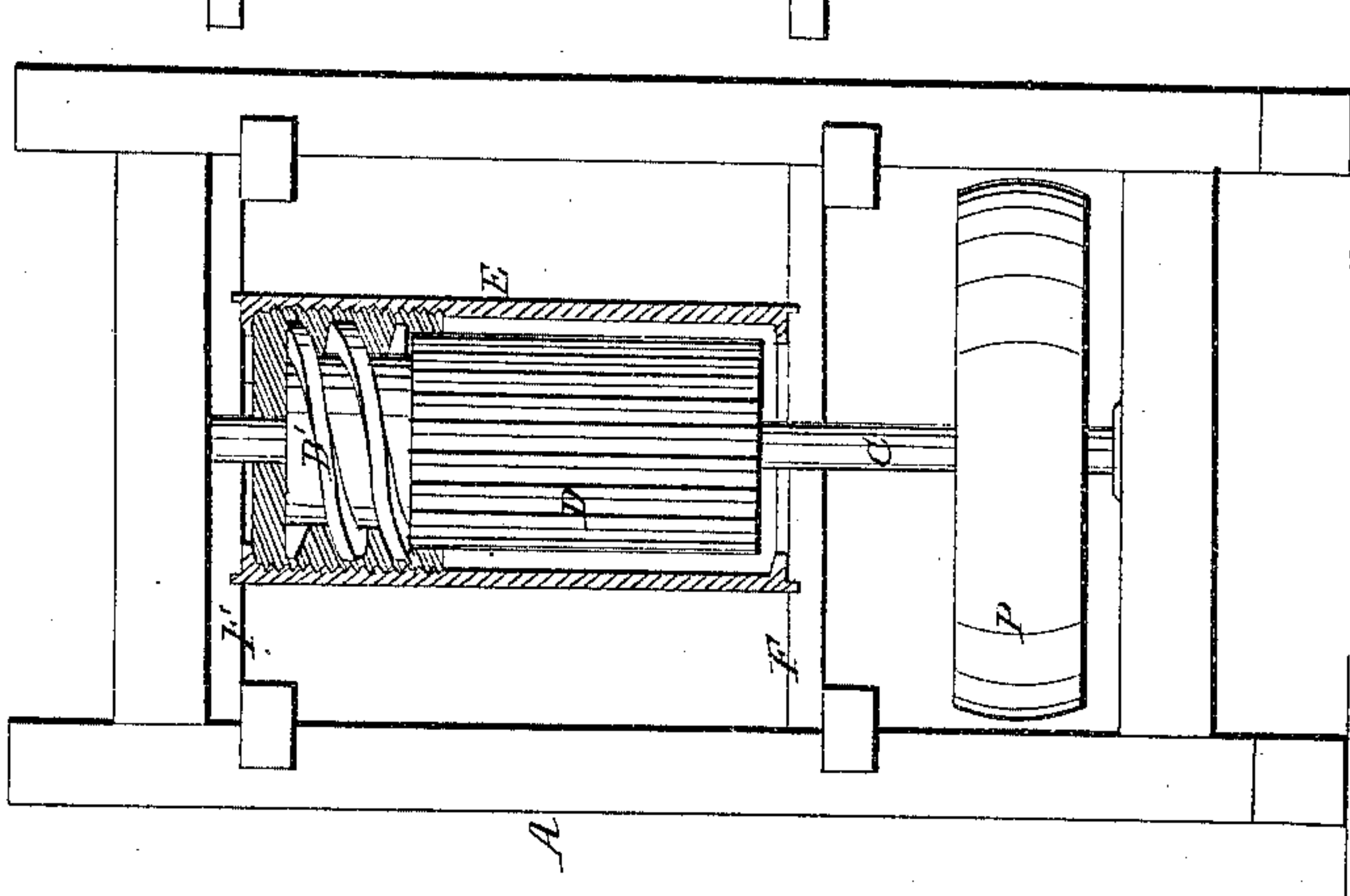
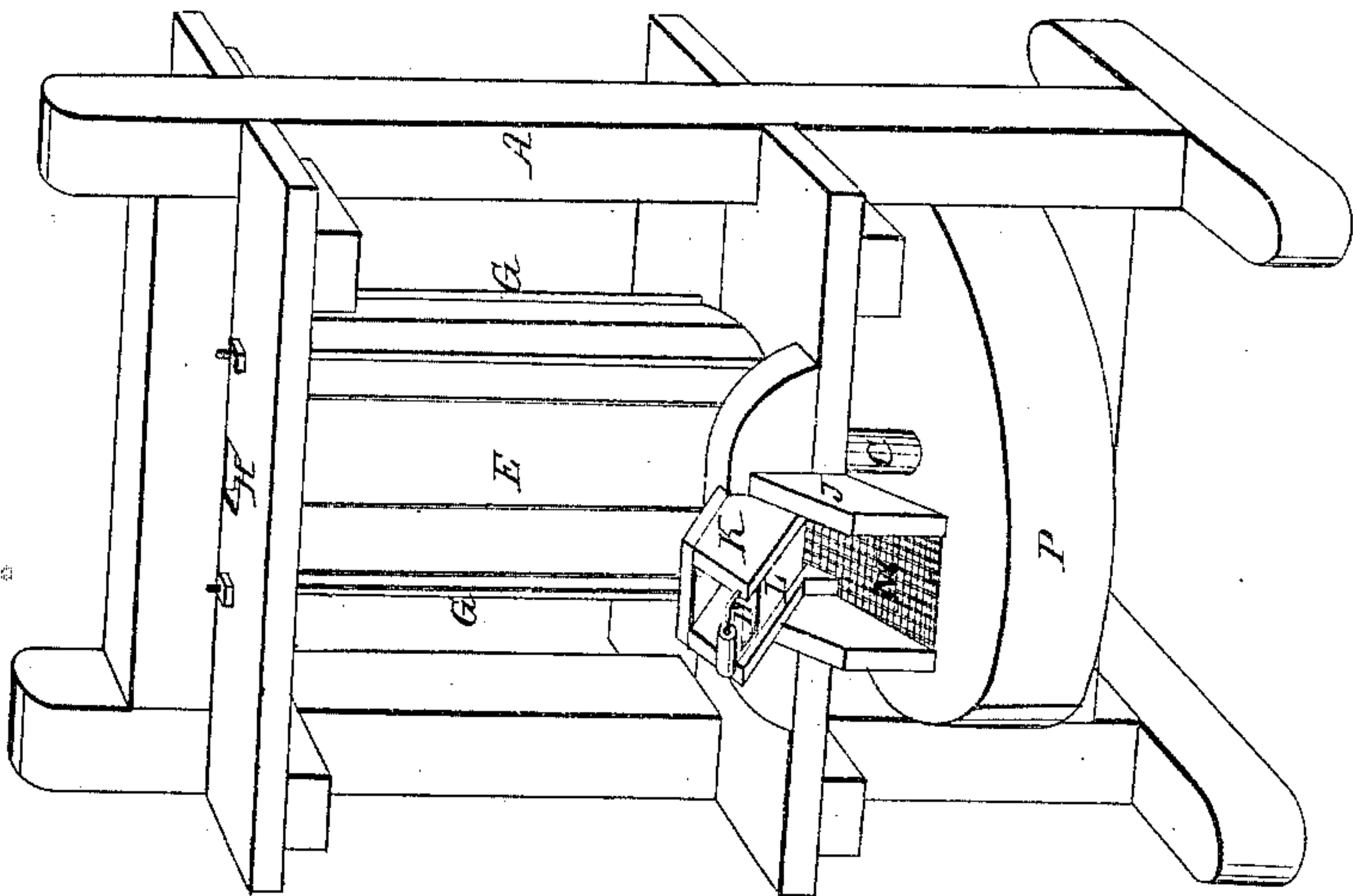


Fig. 1.



UNITED STATES PATENT OFFICE.

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

HULLING-MACHINE.

Specification of Letters Patent No. 6,271, dated April 3, 1849.

To all whom it may concern:

Be it known that I, DAN PEASE, Jr., of the town of Floyd, in the county of Oneida, and State of New York, have invented a new and useful Improvement in the Machine for Cleaning Buckwheat, which is described 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 machine as arranged for operation. Fig. 2 is a geometrical elevation of the machine one half of the case being removed in order to show the revolving cylinder and a portion of the outside or stationary cylinder. Fig. 3, is an elevation of the interior of the segment of the case removed from Fig. 1. Fig. 4, is a side elevation of the weighted valve used as a substitute for the regulating slide.

Similar letters in the several figures refer to corresponding parts.

A is the frame of this machine made of suitable size and strength and material, for the purpose of containing and supporting the several parts of the machine. C is a vertical shaft passing through the center of the revolving cylinder and turning in suitable boxes in the frame and having a large driving pulley P fixed to it around which a band leading to the driving power is passed for giving it the required motion.

D is the revolving cylinder for driving and rubbing the grain against the concave said cylinder being secured to and turning with the shaft C. The upper portion of this cylinder is surrounded by a spiral thread, or section of a screw D' for driving the grain lengthwise of the cylinder. The lower section (which is the longest) is covered with parallel ribs for rubbing the grain against the parallel ribs of the stationary cylinder, for separating the dirt from the grain.

E is the stationary ribbed cylinder in which the cylinder D revolves. The upper portion of this cylinder is ribbed spirally as represented at E'. The lower portion is ribbed like the lower part of the revolving cylinder in parallel ribs as seen at E². This cylinder is composed of parallel segments or staves set near together, but not so close as to touch each other, the spaces between them being sufficiently wide to let the dirt pass through from the interior of the cylinder. The ends of these segments are let into two

parallel heads F, F, having flanges that bear against the inner surfaces of the heads. The heads between which the staves are confined are held together by parallel screw rods G. The upper head contains an aperture H for the reception of the grain. There is an aperture I for the discharge of the grain at its lower end which empties into a tube K inclining upward the bottom of which being provided with a slide L to be raised or lowered in an inclined direction for the purpose of regulating the pressure of the grain in the cylinder.

J is an inclined spout having a wire cloth bottom M upon which the grain is conducted to a common winnowing machine, or other place.

Operation: The machine being put in motion the buckwheat is introduced to the cylinder through the aperture H at the upper end and is met by the screws D' and forced downward to and through the space between the revolving and stationary cylinders D, E, where the rubbing process is performed, it being prevented from discharging freely by means of the regulating slide L and being forced down by the screw at the upper end and prevented from discharging at the lower end until the required degree of force is applied by the screw causes a pressure of the grain between the cylinders, while a portion of the grain is carried around by the revolving cylinder against a portion that is held against the ribs of the stationary cylinder thus causing one portion of the grain to be rubbed against another portion by which it is scoured and is then discharged through an oblong opening L² in the inclined slide which is raised or lowered in order to regulate the pressure.

Instead of the slide to regulate the pressure I sometimes use a weighted hinged valve over the discharge opening, such as represented at l Fig. 4, for the purpose of regulating the pressure on the grain, the weight w being applied in the manner of the safety valve of a steam boiler, that is to say moved from the fulcrum f of the lever V when the pressure is to be increased and toward it when to be diminished. Both cylinders can be toothed instead of ribbed, the ribs being preferred in some cases on account of their being more easily made. One or both screws on the stationary and revolving cylinder can be used at discretion

and the machine can be used in a horizontal, inclined, or upright position. The size, proportion, and material of the several parts can be varied to suit the views of the constructor.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the screw section D' of the cylinder, with the ribbed or toothed

section D, arranged and operating in the 10 manner and for the purpose herein set forth.

In testimony whereof I have hereunto signed my name before two subscribing witnesses this thirtieth day of June, A. D. 1848.

DAN PEASE, JR.

Witnesses:

WM. P. ELLIOTT,

W. STEPHENSON.