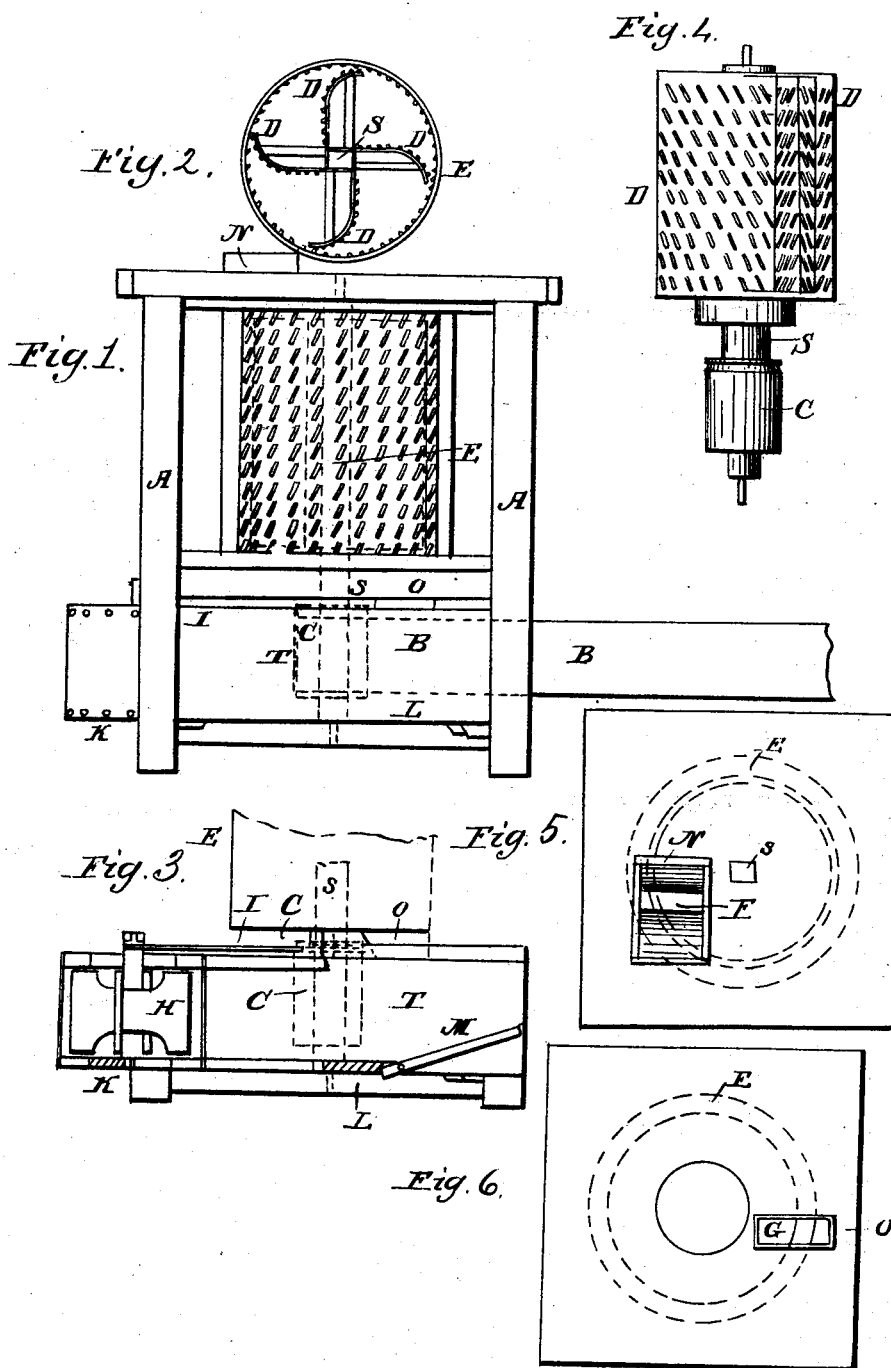


J. PARKER.
Smut Machine.

No. 890.

Patented Aug. 23, 1838.



UNITED STATES PATENT OFFICE.

JOHN PARKER, OF SUNBURY, OHIO.

SMUT-MACHINE FOR CLEANING GRAIN.

Specification of Letters Patent No. 890, dated August 23, 1838.

To all whom it may concern:

Be it known that I, JOHN PARKER, of Sunbury, in the county of Delaware and State of Ohio, have invented as new and useful
5 Improvements in Machines for Cleaning Grain from Smut and other Substances, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

10 This machine consists of a suitable frame A, Figure 1, having a vertical shaft S turning in the center thereof by means of a band B and pulley C, on which shaft are fastened four or more curved wings D, Figs. 2 and
15 4 made of sheet iron and punched in rows of inclined openings, the roughened surfaces being from the center, which shaft and wings are surrounded by a sheet iron cylinder E, punched inward toward the center in
20 oblong apertures inclining about 55° and in parallel rows, the roughened surfaces, of course, being toward the center. This cylinder is closed at top and bottom except at spaces F and G for the admission and dis-
25 charge of the grain, &c., Figs. 5 and 6. The upper space F is surrounded by a hopper N for the admission of the grain and the lower one G by a vertical spout O, which leads into a horizontal trunk T placed below the
30 cylinder and on one side of the shaft of the wings curved at one end and straight at the other. In the curved end is a revolving fan H, Fig. 3, turned by a band I passed around its axle and around the pulley of the
35 before mentioned center shaft. The bottom of the trunk is closed, except at two places where it is left open—one of the openings K is immediately under the fan and the other, L, is about the center of the trunk.
40 From this opening to the discharging end

the bottom is made to incline upward, as at M.

Operation: The cylinder and fan being put in motion at the rate of about 500 or 600 revolutions per minute the grain, &c.,
45 is put into the hopper by which it is conducted to the inside of the cylinders where it is met by the revolving wings which dash it violently against the sides of the cylinder and protuberances therein which has the
50 effect of breaking off the smut from the grain:—a great portion of the former being driven through the intestines of the cylinder and the latter with part of the smut falling into the trunk below, where it
55 is met by the current of air produced by the revolving fan which drives the remainder of the smut and cockle out at the straight end of the trunk, while the clear good grain (being the heaviest) falls through the open-
60 ing near the center of the trunk and upon the inclined board which conducts it to said opening.

The invention claimed and desired to be secured by Letters Patent consists in—
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The peculiar form of the curved punched wings fastened to the shaft revolving within the center of the cylinder—that is to say, in having the side of each wing which is fastened to said shaft made straight and
70 then curved backward from the shaft to its outer extremity and braced by arms radiating from the shaft, to the ends of which the curved wings are fastened as herein described.

JOHN PARKER.

Witnesses:

WM. P. ELLIOT,
W. BISHOP.