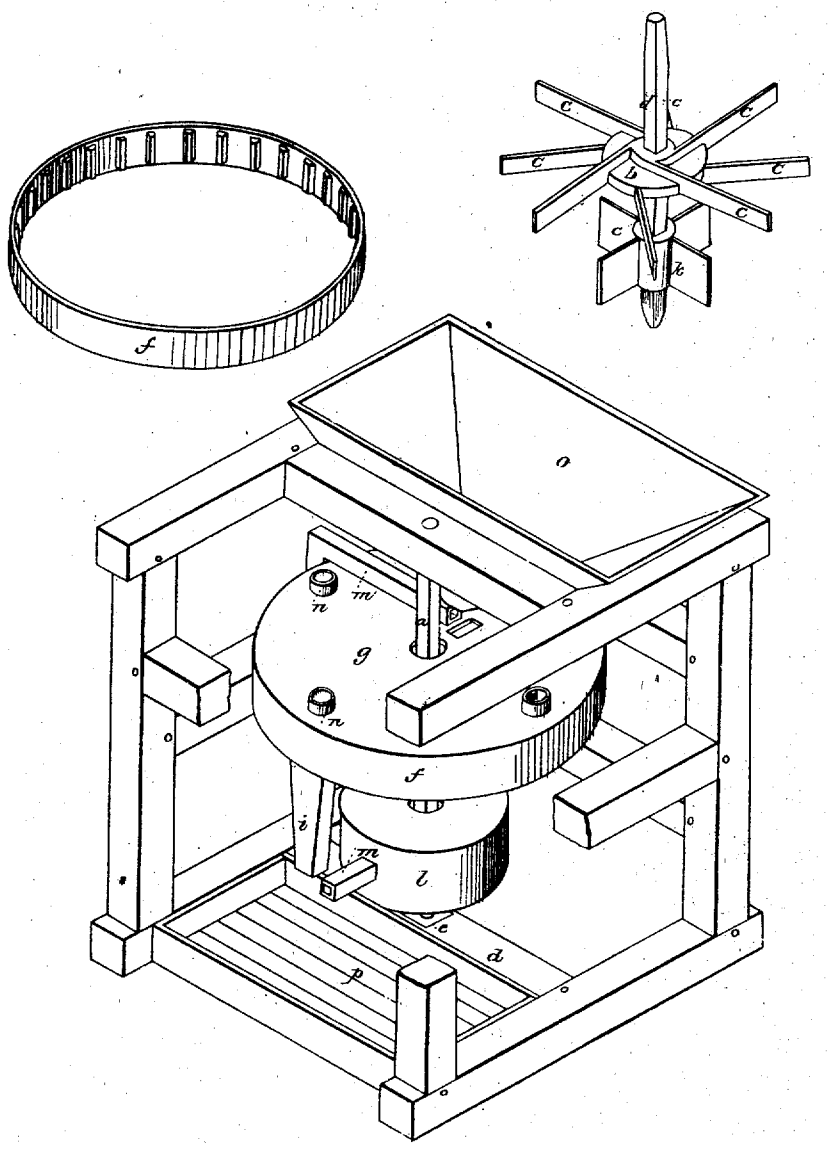
*NO PRINTED SPECIFICATION AVAILABLE*

9436X

A. MUDGE.

SMUT MACHINE.

Patented Feb. 25, 1836



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Abraham Mudge. Canajoharie Montgomery Co. New York

# Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Abraham Mudge himself of his improvement in the machine for separating cockle and other impurities from grain.

To all to whom these presents shall come. Be it known that I Abraham Mudge of Canajoharie in the County of Montgomery and State of New York have invented a new and useful machine for the purpose and the impurities of cockle and other kinds of grain and that the following is a full and exact description of the construction & operation of the said machine as invented by me.

Near the centre of an iron shaft (of about three feet in length & one & half inches in diameter turned and fitted for running in a upright position) place a circular plate of cast iron ten inches in diameter and of sufficient thickness to fasten firmly on the shaft. This plate is provided with eight or more rings or flanges projecting one inch more or less above and below the plate and extending two inches beyond the verge of the plate. The rings or flanges on the under side near to the shaft between the rings or flanges on the upper side & the rings or flanges may be connected as shown by projections beyond the plate & form in all the number of rings described above but double that width. The shaft with the circular plate and rings or flanges secured thereon and well balanced is placed in a convenient frame fitted to receive it with steps Brass &c. &c. — The plate and rings are then covered by a case of sufficient dimensions of such diameter that the space between the rings and the inner surface of the case will be about one inch. The case is covered with tin by projecting from the inner surface about one third of an inch and terminating half an inch from the bare edge or bottom of

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the curb and about five inches apart. or if the curb is made of wood it may be perforated with small holes or the curb may be made of iron. — The depth or height of the curb is such that the wings will be about one third of an inch from the floor on which the curb rests. and the same distance from the cover of the curb resting on a floor of cast or sheet iron and is secured at top also without revolution, near the centre of the cover is a opening to admit the grain into the machine. And through the floor on which the curb rests and near the outer side is also an opening of about three inches long and one and one half inches wide for the purpose of allowing the grain to escape. On the main shaft and at a convenient distance below the bottom of the curb is a wind wheel of about fourteen inches diameter and about five inches in depth the circumference in a case of thin sheet iron having two places of discharge. one of the spouts or places of discharge direct to the grain as it escapes from the machine above. The grain as it escapes from the curb is conducted by a short spout into the mouth of a case set in motion by the wind, case through the stream of grain as it falls from the short spout into a narrow spout placed to receive it standing on an inclination of about 45 degrees elevation through which the wind drives the dust &c and the grain descends and escapes below. The other wind spout or place of discharge for wind is on the opposite side of the machine and the wind is conducted upwards to the opposite side of the curb by means of a spout or conduct and there liberated across the cover of the curb and made to pass through the grain before it enters the machine for the purpose of separating dust husks &c from the grain. There is also one or more openings thro' the covering of the curb near the outer edge and spouts attached thereto for the purpose of allowing small & dust to escape from the machine. The machine is set in motion by means of a pulley and strap at the rate of about two hundred revolutions per minute. The grain being introduced through

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Revolving of the cask near the centre is thrown by the rings or flanges attached to the circular plates against the cask and ribs or projections attached thereto with sufficient force to break the smut balls and disengage the smut and other impure substances which adhere to grain and as the fall passing swiftly across the cask mitillet crosses the current in the flour in which the cask is and is conducted by the chute specified in the annexed specification by the wind wheel before described. A machine of the above described dimensions will clean from eight to ten bushels of grain an hour. When a machine is required to perform more business the dimensions are to be enlarged in proportion to the amount of business required to be performed, and two or more of the circular plates with rings or flanges (proportioned to the dimensions of the cask to be used) are to be placed on the shaft. The rings on the upper most plate alternating or occupying the spaces between rings on the plates beneath them. The principles which I claim to have applied to the purpose of cleaning grain from smut and other impure substances by means of the machine above described and which application I claim to have invented and which I believe to be new and useful is that of throwing the grain by means of rings or flanges attached to a circular plate as above described against some hard substance with sufficient force to break the smut balls &c &c

And whether the plate be circular or any other form as that the rings or flanges be of any other figure or dimensions than I have described. The inventive attaching rings or flanges to a plate of cast iron or any other substance for the purpose of cleaning grain I claim as my invention. The form of the cask with ribs projecting inward from the inner surface whether made of cast iron or any other material I also claim as my invention. The wind cask within with ribs or floors or partitions either I also claim as part of my invention and the wind wheel with its places of discharge through the covering I also claim as part of my invention

Witnesses
Elis D Terry
Henry S Gibson

Abraham Hedge

(1170 Words)

(Feb 25. 1836)