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McCormick

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(54) **GRIST MILL, & SELF-STOPPER**

(76) Inventor: **Robert McCormick**

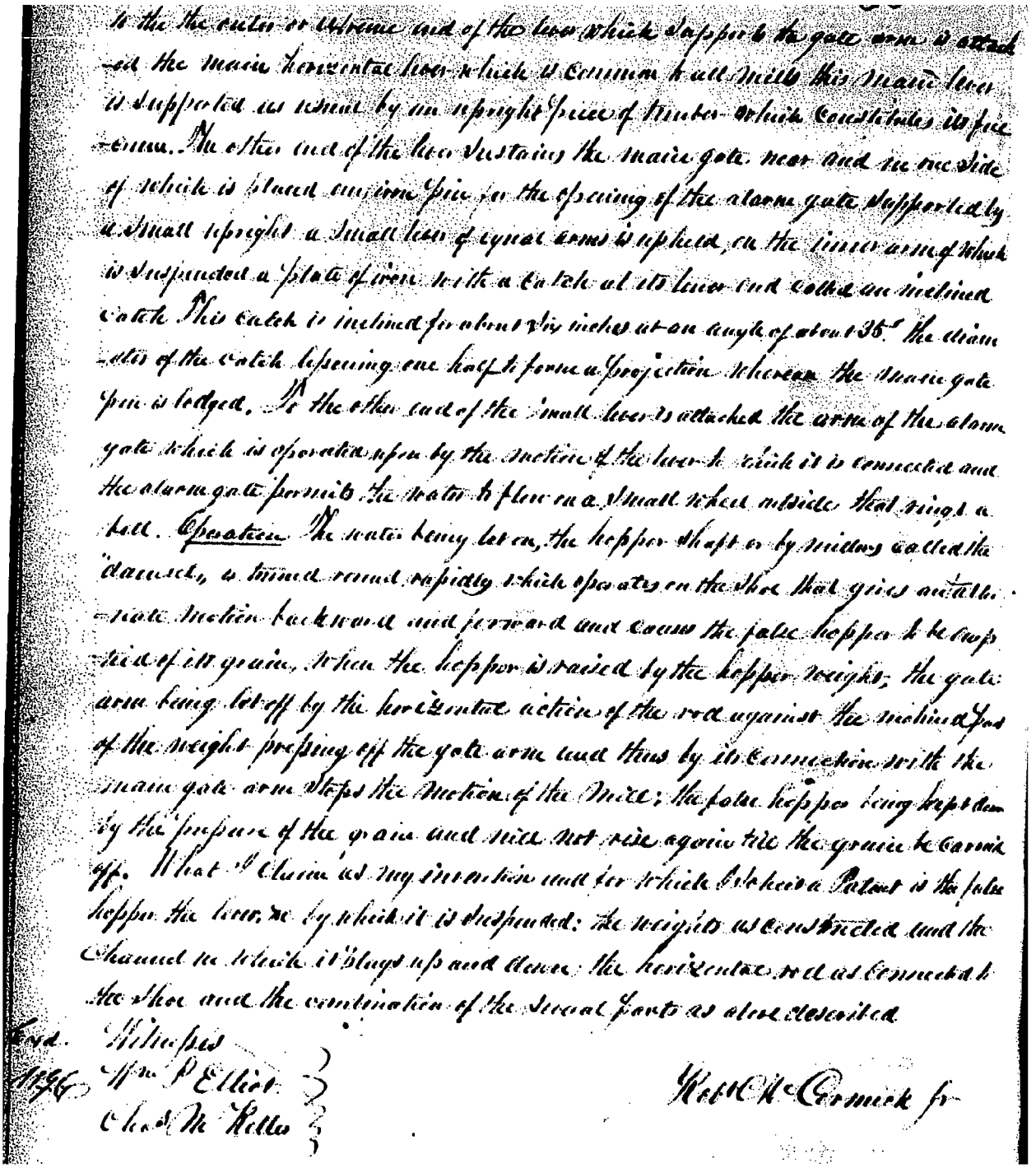
Robt McCormick Augusta County Virginia

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 Robert McCormick fine himself of his improvement in the Grist Mill called "Self Stopping for Stopping the Run of Mills"

Be it known that I Robert McCormick of Augusta County State of Virginia have invented a new and useful improvement in the Grist Mill called "Self Stopping for Stopping the Run of Mills" which is described as follows. viz. I place inside hopper so made so as to fit the bottom or lower part of the common stationary hopper. This hopper is suspended by a cord, strap or chain, connected to a small lever overhead the fulcrum of which is nearer to one end than to the other the longest part of which is connected also by a cord strap or chain running over a pulley to a weight which plays up and down according to the state of the hopper working when the hopper is free from grain. The weight dependant upon the side of the hopper for its action is suspended within upon one [illegible] or channel composed of three sides of a square which are stationary: the gate arm which will be hereafter described making the fourth or front side. The inner side of the weight is beveled off for about nine inches at an angle of about 45° having space sufficient to enable said side to admit of a pin upon which the gate arm is fixed till the greatest thickness of the inclined part of the weight comes in contact with the end of a rod that throws off the gate arm. This last mentioned rod is horizontally placed and one end framed into the shoe of the hopper from which it receives motion with a notch backward and forward and the other running through the back side of the weight frame or channel through one through which the stationary pin passed in end of regulating screw rods over all mills is suspended by a horizontal lever overhead running from one of the sides of the mill, and secured by one thereof right angle made so as to be adapted to walls of the old construction.

Connected to rather resting through the first mentioned horizontal lever is the one that hopper is which screw by a cord and hook to raise the [illegible] by which the stones may be let down when necessary. Connected



to the the outer or Elbow end of the lever which supports the gate arm is attached the main horizontal lever which is connected with this main lever is supported as usual by an upright piece of timber which constitutes the fulcrum. The other end of the lever sustains the main gate near and to one side of which is placed another pin for the opening of the alarm gate supported by a small upright a small lever of equal arms is upheld on the inner arm of which is suspended a plate of iron with a catch at its lower end called an inclined catch This catch is inclined for about two inches at an angle of about 35° the diameter of the catch opening one half to form a projection whereon the main gate pin is lodged. To the other end of the small lever is attached the arm of the alarm gate which is operated upon by the motion of the lever to which it is connected and the alarm gate permits the water to flow on a small wheel outside that rings a bell. Operation The water being let on the hopper shaft or by millers called the channel, is turned round rapidly which operates on the shoe that gives a vibrating motion backward and forward and causes the false hopper to be supplied of its grain. When the hopper is raised by the hopper weight, the gate arm being let off by the horizontal action of the rod against the inclined face of the weight pressing off the gate arm and thus by its connection with the main gate arm stops the motion of the Mill; the false hopper being emptied by the pressure of the grain and will not rise again till the grain be taken off. What I Claim as my invention and for which I desire a Patent is the false hopper the lever by which it is suspended: the weights as constructed and the channel in which it plays up and down the horizontal rod as connected to the shoe and the combination of the several parts as above described

Witnessed
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