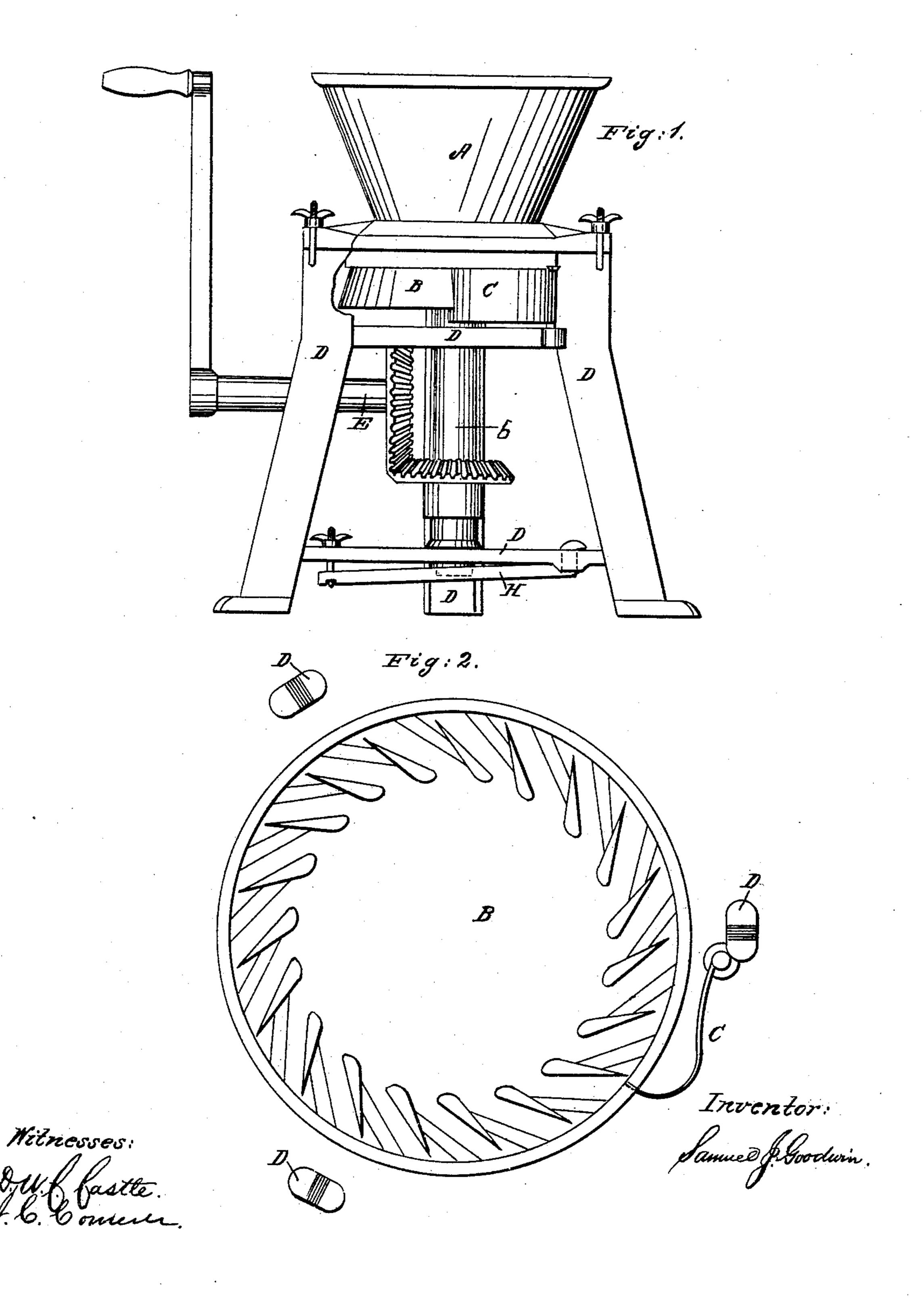
S. J. GOODWIN.

Paint Mill.

No. 63,502.

Patented April 2, 1867.



Anited States Patent Affice.

SAMUEL J. GOODWIN, OF ROCKTON, ILLINOIS.

Letters Patent No. 63,502, dated April 2, 1867.

IMPROVEMENT IN PAINT-MILLS.

The Schedule referred to in these Netters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Samuel J. Goodwin, of Rockton, Winnebago county, in the State of Illinois, have invented a new and useful Improvement in Mills for Grinding Paint; and I do hereby declare that the following is a full and exact description thereof, which will enable any one skilled in the art to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon and making a part of this specification, in which—

Figure 1 is a side elevation of the mill complete.

Figure 2 is a top view of the lower grinding plate B, sections of the frame D, D, and spring-scraper C.

Similar letters of reference indicate like parts in each of the said figures 1 and 2.

D D represent the frame, E the bevel-gear shaft with crank b, the bevel-gear shaft resting upon the lever H and turning the grinding plate B C the spring-scraper, and A the hopper. This style of paint-mills has heretofore been constructed with the outer edge of the grinding plate B left square, so that when run at a high rate of speed, a considerable sheet-like stream of paint would be thrown off by centrifugal force, causing much waste and annoyance, requiring an apron to be placed around the mill to prevent everything near being spattered with paint. But by the use of my invention, bevelling the edge of the grinding plate B, as shown in fig. 1, the tendency of the paint to fly off by centrifugal action is entirely broken up, and the stream of finely ground paint adheres to the edge of the plate no matter how high the speed at which the mill is driven, and the paint is cleaned off by the spring-scraper C, and caused to run into the trough conducting to the reservoir. These mills may be made of any available size, and power communicated by belt or gear. I do not claim the arrangement of the hopper, grinding nut, driving and adjusting mechanism, nor do I claim the scraper, as I am aware that these parts are not new. The distinguishing characteristic of my invention consists in constructing the lower revolving grinding nut with a bevelled or inclined rim, upon which the paint is delivered or discharged from between the grinding surfaces, said nut having been heretofore constructed with an upright or perpendicular rim or discharging surface. I am also aware that a rebate or groove has been formed in the periphery of the lower grinding nut for the purpose of attaining the same end as that which is accomplished by my invention, but this means not only differs from mine with respect to construction, but is attended with the objection that the rim cannot be cleaned without great inconvenience, whereas my discharging rim can be cleaned with facility, by reason of the fact that the rim or periphery of the grinding nut is perfectly plain and smooth. I would here state that inasmuch as the speed of the mills increases in proportion to their size, the bevel of the rim should be increased in accordance with the centrifugal force which is due to the increased size and speed.

Having thus described my invention, what I claim as new herein, and desire to secure by Letters Patent, is— The revolving grinding nut when constructed with a bevelled rim at its lower portion, substantially as described.

SAMUEL J. GOODWIN.

Witnesses:

D. W. C. CASTLE, J. C. CRONIN.