47118 XR 2,220

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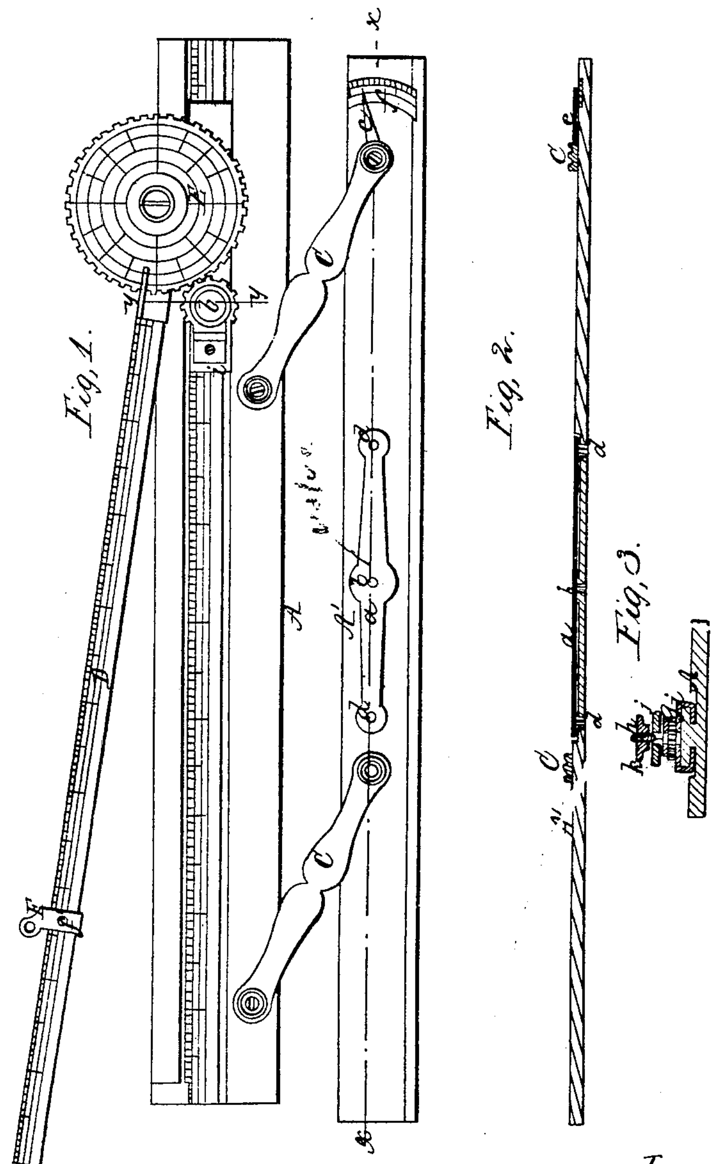
S. L. Simpson,

Parallel Ruler.

No. 2,220. Reissued Apr. 3. 1866.



1197

X1200

Witnesses,

Theo Lasell

Inventor,

S. L. Simpson

Per Munn & Co

Attorneys

2,220 —S. L. SIMPSON, New York, N. Y.—*Ruler.*—Patented June 27, 1865; reissued il 3, 1866.

im.—First, the springtop *d*, applied in combination with a valve *a*, substantially as e purpose set forth.

e and scale *f* in combination with the link C, connecting the two parts tially as and for the purpose described.

ncil slide F in combination with the

substantially as and for the purpose set

with the arbor *h*, pinion *g*, and

UNITED STATES PATENT OFFICE.

JONAS NOLT, OF WEST HEMPFIELD TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA.

MACHINE FOR CLEANING GRAIN.

Specification of Letters Patent No. 2,220, dated August 11, 1841.

To all whom it may concern:

Be it known that I, JONAS NOLT, of West Hempfield township, in the county of Lancaster and State of Pennsylvania, have invented a new and Improved Mode of Separating Smut from Wheat; and I do hereby declare that the following is a full and exact description.

I make a wooden cylinder A, of about two feet six inches in diameter, and about five feet long, the ends in part shut leaving a tolerable large opening in the center B, for the admission of air, in the center of this cylinder I place a shaft with arms through it, to which the fans C, are attached, this I call the windmill, and on the one end of the shaft is placed a wheel D, for the purpose of turning the shaft; on the opposite end is a crank E, which makes a sweep of about four inches for the purpose of shaking the shoe, and the fall board on which the grain falls from the shoe. In the lower side of the cylinder of this windmill, as at *a*, is an opening the whole length thereof, through which the wind passes out; a board F, is placed under this opening at an angle of about twenty five degrees with the horizon to give the wind its proper direction to, and on the fall-board, H.

A frame G, is made of scantling about six and a half feet long, and about five feet high and wide enough to receive the windmill, which is placed near one end of this frame. Immediately under the board F which gives the direction to the wind the fall-board H, is suspended by straps, I, attached one end to it, and the other to the top of the frame; the side of this fall-board next to the windmill is depressed at about four degrees, with nearly the same depression of the end next the whirl of the windmill. A hopper K, is placed in this frame with the shoe L, which lets the grain down on the fall-board near to the corner next the crank end of the windmill. An upright shaft M, is placed with three projecting arms, one to receive the end of a strip of wood N to which the other end is attached to the crank. The second arm O, shakes the shoe, by striking it in passing to and fro, and the third arm P, shakes the fall-board being connected by a strip. When the windmill is put in motion the full grains of wheat will roll slowly down in the direction of the most depressed corner of the fall-board, while the crosscurrent of wind will roll the smut and other light grains from among the good grains and bear it off at the far side of the fall-board from the wind, the steady current of air might however roll some of the good grains off at the same side also, to prevent which, I put two ledges *q*, crosswise on the fall-board which has a tendency to turn the good grains back against the wind in the proper direction while the light continues to be driven off.

The advantages of this machine over all others, are, that it separates the smut grains without breaking them, thus preventing a portion of this light filth which when broken attaches itself to the grains of which, and also frees the mill from the bad smell and filthy black dust of the broken smut: and lastly that it requires so little force to turn it that it will not impede the progress of the mill.

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

The manner in which the fall-board H, the hopper K, the shoe L, and board F, for directing the current of air upon the grain and combining together—that is to say the arranging the hopper and shoe over the lower end of the wind board F, and inclining the fall-board H, on its inner side and one end so as to allow the grain to cross the current of air the whole being constructed and operating substantially as set forth.

JONAS NOLT.

Witnesses:

SAML. DALE,

JAMES J. DALE.