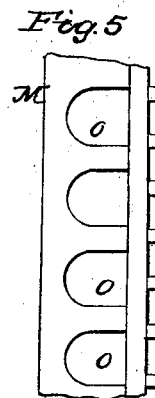
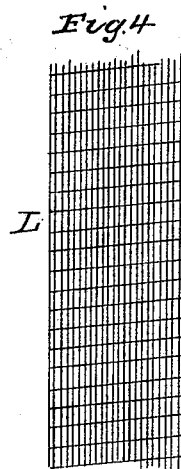
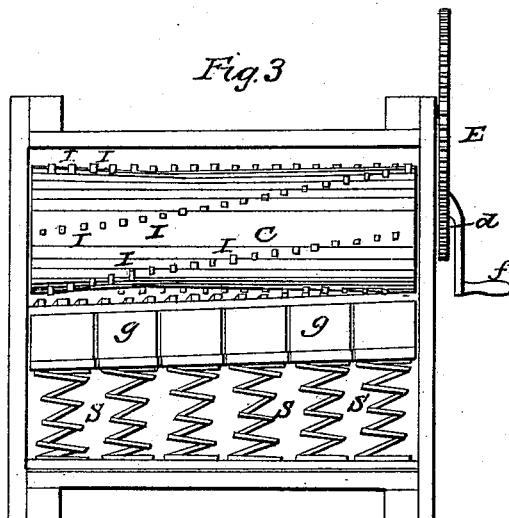
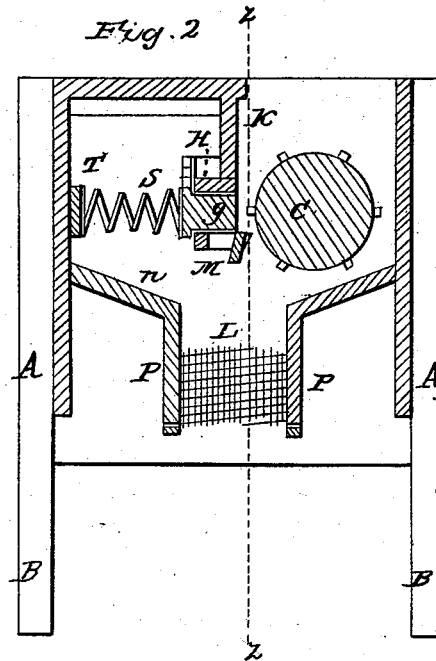
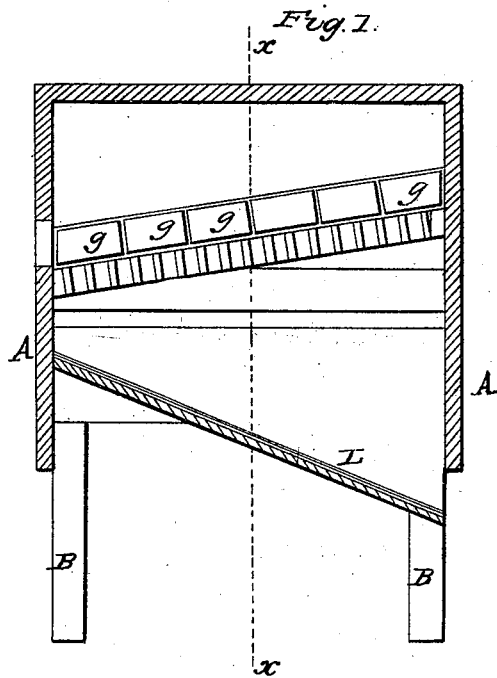


J. BRINKERHOFF.

Corn Sheller.

No. 46,540.

Patented Feb. 28, 1865.



Witnesses
John P. Jacobs
C. M. Alexander

Inventor
Jacob Brinkerhoff
per J. T. Alexander atty.

UNITED STATES PATENT OFFICE.

JACOB BRINKERHOFF, OF AUBURN, NEW YORK.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 46,540, dated February 23, 1865.

To all whom it may concern:

Be it known that I, JACOB BRINKERHOFF, of Auburn, in the State of New York, have invented certain new and useful Improvements in Corn-Shellers; and I hereby declare that the following is a true and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figures 1 and 2 represent two vertical cross-sections taken in the lines *xx* and *zz*. Fig. 3 represents a plan view of my machine. Fig. 4 represents a plan view of the sieve which is designed to separate the corn from the chaff.

In Figs. 1 and 2 the letter A designates the frame of my sheller, which consists of a box nearly square, supported by the legs B. C, in Fig. 3, represents a cylinder occupying a horizontal position near the top of the box and at right angles with its ends. The cylinder C has its bearings in the two ends of the box. One of the gudgeons of cylinder C passes through the casing of the box and has attached to it the pinion *d*. (See Fig. 3.) The pinion *d* gears into the driving-wheel E, to which the crank *f* is fastened. The cylinder C is furnished with a series of iron knobs, I, arranged in parallel rows, the number of rows to be regulated by the size of the cylinder. These knobs are not arranged in lines parallel with axis of the cylinder, but descend at a small angle from the end next to the gearing to the opposite end.

The letter *g* represents a series of blocks whose function is to press the ears of corn against the cylinder C so as to bring it under the action of the iron knobs I. The blocks *g* are furnished with a shoulder or flange on their upper surface, as seen in Fig. 2. Against these shoulders the board H is made to press in order to keep the blocks *g* sufficiently far from cylinder C to admit the ears of corn. The board H is attached to the vertical board K, and K is fastened to the plank that constitutes a part of the top of the box A.

It will be observed that the blocks *g* are connected together by a strip of leather, which passes through them. By this arrangement each block acts to a certain extent independent of the others, and can adapt itself to the size of the ear of corn with which it is in contact.

s represents the spiral springs, each one of which acts upon a separate block, giving

thereby the degree of pressure required by the several blocks when the ears of corn are of unequal size.

When new corn is to be shelled, the board T, against which the outer ends of the springs rest, can be pressed forward by placing cleats behind it and thus compress the springs so that their power is sufficiently increased to hold the corn steadily to the cylinder, green corn requiring a greater force to separate the grains from the cob than corn which is thoroughly dried.

Beneath the blocks *g* is the bed-piece M, as exhibited in Fig. 5. The bed-piece is furnished on the edge next to the cylinder C with small projections or knobs, placed near enough to prevent the cobs from passing through, but sufficiently far apart to give free egress to the corn. By this arrangement the corn will pass off without the danger of being crushed by the knobs on the cylinder.

It will be observed that both the bed piece M and the blocks *g* have a gradual ascent from the opening in the side of the box or casing to the opposite side. This inclination is necessary in order to carry off the cobs with due expedition. There are a number of openings, *o*, in the bed-piece immediately behind the projection above-mentioned, intended also for a passage for the corn. Beneath the cylinder C is the hopper to convey the corn to the sieve L. (See Fig. 2.) This hopper consists of the two inclined boards, *n n*, attached to the vertical boards *p p*, and extend the length of the interior of the box A. The sieve L is designed to carry off the chaff and leave the corn perfectly clean at the moment of its discharge from the sheller. By this arrangement I am enabled to dispense with fans or blowers, which are ordinarily used in connection with the sieve.

In operating my machine the corn is put into the opening made in the top of the box A.

Having thus described my invention, what I claim, and desire to secure, by Letters Patent, is—

The bed-piece M, constructed as and for the purpose herein set forth.

JACOB BRINKERHOFF.

Witnesses:

JOHN J. BRINKERHOFF,
WILLIAM CONKLIN.