D. S. HOLLISTER.

Corn Sheller.

No. 4,572. Patented June 13, 1846.

Fig. 2

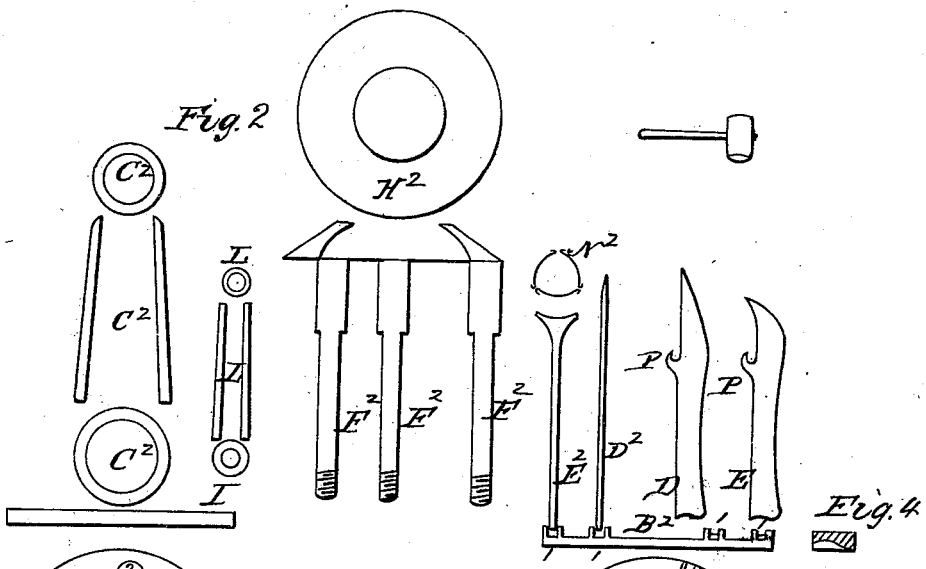
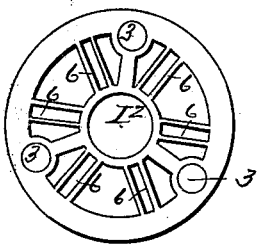



Fig. 4





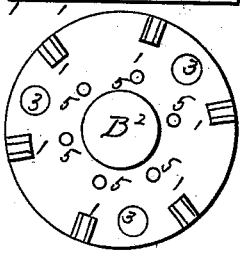
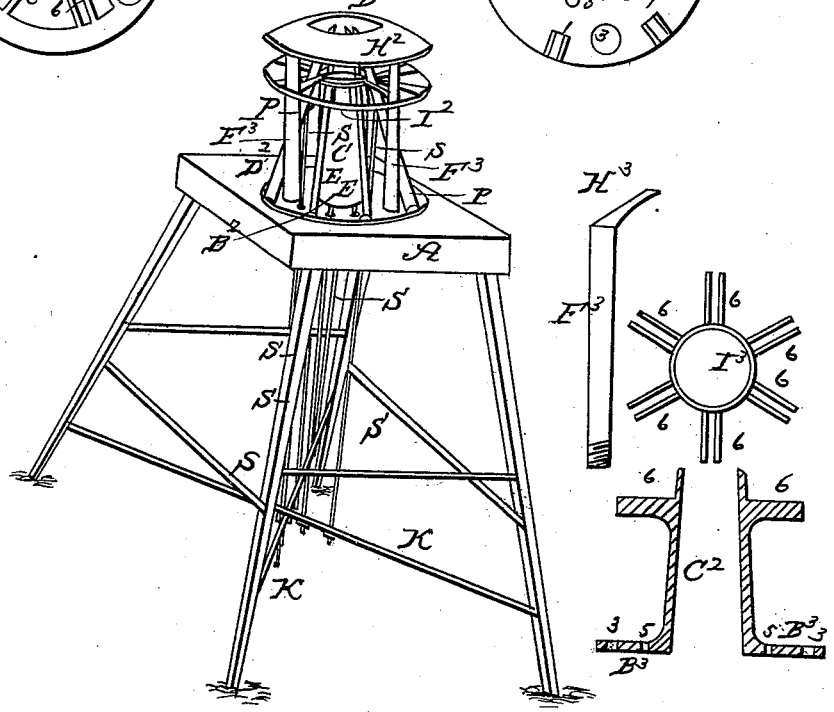




Fig. 1



# UNITED STATES PATENT OFFICE.

DAVID S. HOLLISTER, OF BALTIMORE, MARYLAND.

## CORN-SHELLER.

Specification of Letters Patent No. 4,572, dated June 13, 1846.

*To all whom it may concern:*

Be it known that I, DAVID S. HOLLISTER, of the city of Baltimore and State of Maryland, have invented a new and useful Machine for Shelling Corn, which may be fully understood by the following description.

In the drawings herewith annexed, Figure 1 is a perspective view of the machine complete and ready for use, Fig. 2 is a view of all the parts of the machine taken separately, Fig. 3 represents another method of constructing it by which the bare cylinder and guides for the scrapers are all cast in one piece and the dome and columns in another, dispensing with the hollow columns marked L.

Like parts are all marked by the same letters.

Fig. 1, A is the wooden frame on which the iron work rests, it is made in the form of a stool, the drawings of which are on the scale of four inches to the foot the scale of the iron work is six inches to the foot.

B, Fig. 1 is a base of cast iron or other metal which supports the parts above.

C is a cylinder through which the cob passes as the ear of corn is driven with a mallet or otherwise through the machine and operates a guide to the same.

$D^2$ is a long pointed scraper three in number the upper ends or points of which are seen through the opening in the dome or top of the machine $H^2$, there are placed in a triangular form and when the end of an ear of corn is inserted between said points and forced through each point removes one or more rows of corn from the cob thereby breaking the arch of corn and rendering the residue easily removed. $E^2$ are three other scrapers set in the same manner as the first and so shaped (see $E^2$ and $N^2$) as nearly to encircle the cob, these being shorter than the set $D^2$, are placed in the alternate sections between the first set, thus forming a complete circle through which the cob must pass in the process of shelling which is done in the most perfect manner. $F^2$ are three columns which support the top $H^2$, and connects the whole together by means of screws with nuts which pass through the base $B^2$ and the top of the stool A.

$H^2$ is the cap or dome with a hole through the center of the top through which the ear of corn is passed and serves to protect the points from the blow of the mallet.

$B^2$ is a top view of the base of the iron work 1, 1, 1, 1, 1, 1, of which are projections with side pieces the space between the cheeks of the projections are circular see I I Fig. 4 to suit the foot of the scrapers $E^2$ and $D^2$ the circle prevents an outward movement the cheeks or sides confine them laterally while the springs hold them down thus they work on a pivot.

3, 3, 3, are holes for the foot of the columns $F^2$.

5, 5, 5, are holes through which the wires or cord pass which connect the springs K, with the scrapers E and D at the hook P. The springs K K in Fig. 1 may be made of wood and form a part of the stool extending diagonally from one leg to another crossing at right angles one being placed a little below the other to admit of the slight vibration to which they are subjected in the operation of the machine.

The upper set of scrapers or points $D^2$ being all attached by the wires S S S to one of the springs K the other set of scrapers $E^2$ are by like means attached to the other spring K by this arrangement the action of each set of scrapers is independent of the other while each point or scraper acts in unison with its fellow all of which is found to be indispensable with the correct working of the machine. S, S, S, S, S, S, are the wires or cord which connect the springs K K with the scrapers E and D as above mentioned.

In Fig. 2 the circular plate $I^2$ serves as a guide to the scrapers E and D they being placed and work in the openings 6 6 6 6 6 6. The columns F, F, F, pass through the openings 3 3 3.

L is a hollow column through which the columns $F^2$ $F^2$ $F^2$ are passed and rests their base upon the base $B^2$ and supports the plate $I^2$ inclosing that portion of column $F^2$ between the plate $I^2$ and base $B^2$.

Fig. 3 is another and better method of constructing the machine in which the base $B^3$ the cylinder $C^3$ the guides for the scrapers 6 6 6 6 6 6 are all cast in one piece. The dome or cap H and the columns $F^2$ are also cast in one piece with a screw placed in the foot of each column which passes through the base $B^3$ and the top of the stool A the whole of the iron work thus secured by a nut on the end of said screw. In this arrangement the hollow column L is dispensed with also the plate $I^2$ the guides for the scrapers being cast on the cylinder $C^3$

(as represented by $I^3$) the base $B^3$ being also cast on the same cylinder has the same form as is represented in $B^2$.

$C^3$ represents the cylinder of iron or other metal with base $B^3$ and the guides 6 6 6 6 6 6 all in one piece the base at the lower end thereof and the guides near the top, this cylinder forms a guide to the cob in the process of shelling corn and it also sustains the guide for the scrapers.

Having thus fully described every part of my machine separately and combined what I wish to secure by Letters Patent is—

1. The manner of constructing the points $D^2$ by which the natural arch of the corn on the cob is broken and the shelling thus rendered comparatively easy.

2. The method of constructing the scrapers $E^2$ by which the corn remaining on the cob after passing the points $D^2$ is completely removed.

3. The manner of combining springs with wires or cord attached with the scrapers by which an equal and simultaneous action is produced upon all the points or scrapers composing each set.

DAVID S. HOLLISTER.

Witnesses:
T. C. DONN,
T. F. HICKEY.