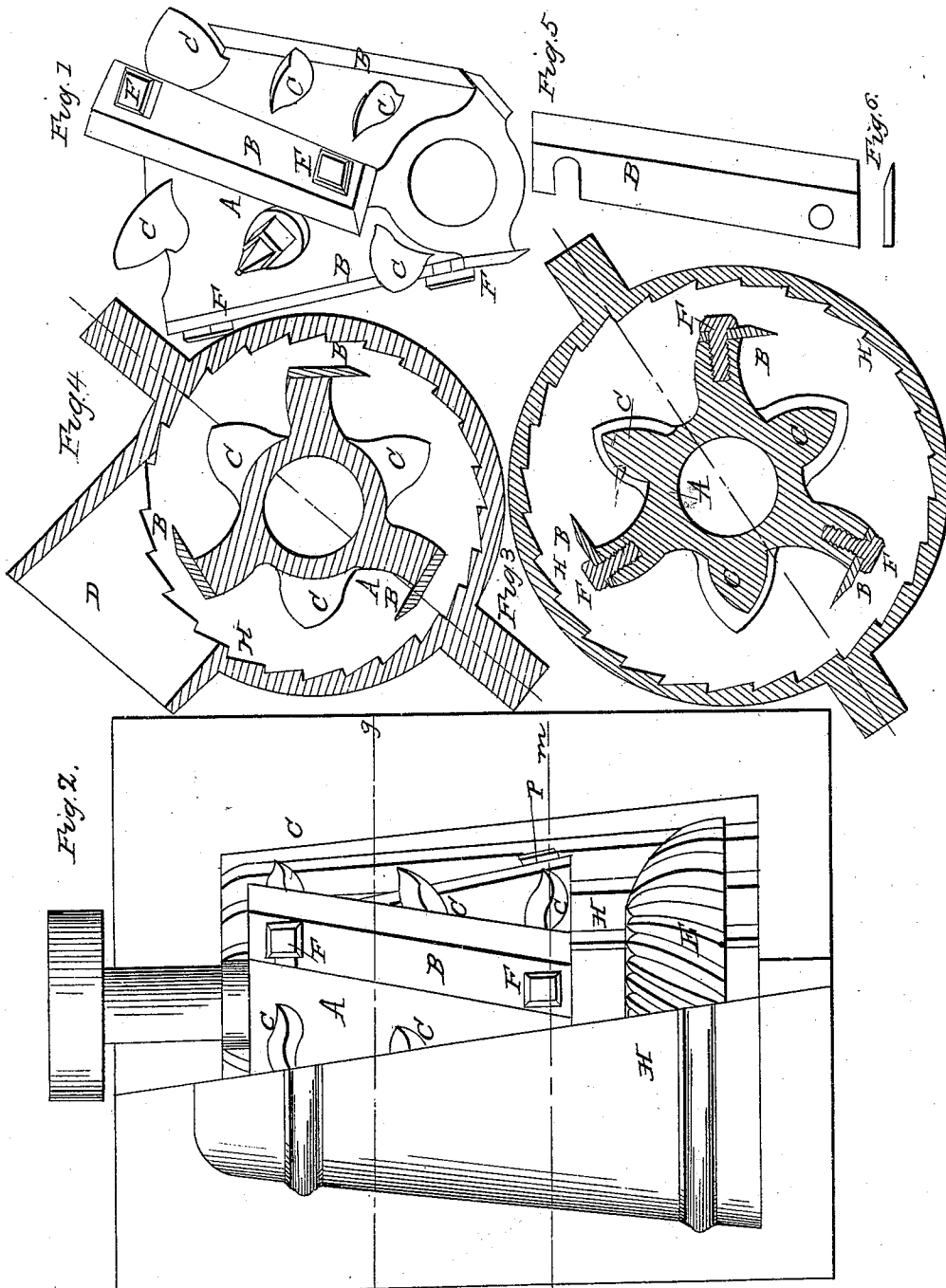


S. B. SHINN.

Grain Mill.

No. 23,865.

Patented May 3, 1859.



ATTEST
Chas. H. Keefwell
Wm. P. Berry

INVENTOR
Samuel B. Shinn

UNITED STATES PATENT OFFICE.

SAMUEL B. SHINN, OF PHILADELPHIA, PENNSYLVANIA.

CORN AND COB CUTTER.

Specification of Letters Patent No. 23,865, dated May 3, 1859.

To all whom it may concern:

Be it known that I, SAMUEL B. SHINN, of the city of Philadelphia, in the county of Philadelphia, State of Pennsylvania, have
5 invented a new Mode of Cutting and Crushing Corncobs with Corn or other Hard Substances such as are used in Grist or Portable Mills; and I do hereby declare that the following is a full and exact description
10 thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 is a perspective view of the cutter head A with knives and crushers attached.
15 Fig. 2 is a longitudinal elevation of a grinding mill with my invention attached. Fig. 3 is a transverse vertical section through *m*, *m*. Fig. 4 is a transverse vertical section through *g*, *g*, showing feed hopper D. Fig.
20 5 is a plan view of the knife. Fig. 6 is a transverse section of knife.

My invention consists in the peculiar construction of the cutter head A with or without the knives B and crushers C. My first
25 claim relates to this. To describe it more fully I would state that in mills where brittle or easily broken substances are to be ground the knives B and crushers C are not requisite, the blades of the head performing the work as well, but where damp,
30 wet, tough, or fibrous substances are to be ground it is necessary that the knives B and crushers C should be used. The blades of the head are those parts upon which the knives B are fastened. To describe the construction of the cutter head A more fully
35 I would state that with the taper to the head the blades are set at an angle. By this

construction of the cutter head A I not only obtain a shear cut but a great propelling
40 force of the cut and crushed substance toward the grinding bur E. This propelling nature of the cutter head A keeps the grinding bur E constantly supplied with the proper amount of cut and crushed material.

In applying my invention to all grist or
45 portable mills I would state that in the longitudinal elevated mill H shown in the drawings the cutter head A is applied longitudinally beneath the hopper D but in vertical
50 or upright mills I either place it in the hopper or below it in a cavity, in a vertical position. The knives B are held in position by screws F or any other suitable means the substance to be cut and crushed is fed
55 in at hopper D peculiar to all grinding mills.

I do not mean to be understood as confining myself to any particular angle of the knives B or blades of the head A nor to the
60 number of the knives B or crushers C or blades upon the head A nor do I claim the knives B separately considered for I am aware that they are used for other purposes nor do I claim the concaves of the mill H
65 or the bur E placed therein. But

What I do claim is—

The peculiar construction of the cutter head A as specified with or without the combination of the knives B and crushers C
70 arranged and operating in the manner and for the purpose set forth and specified.

SAM. B. SHINN.

Witnesses:

CHAS. F. HELLFRICHT,
WM. I. BERRY.