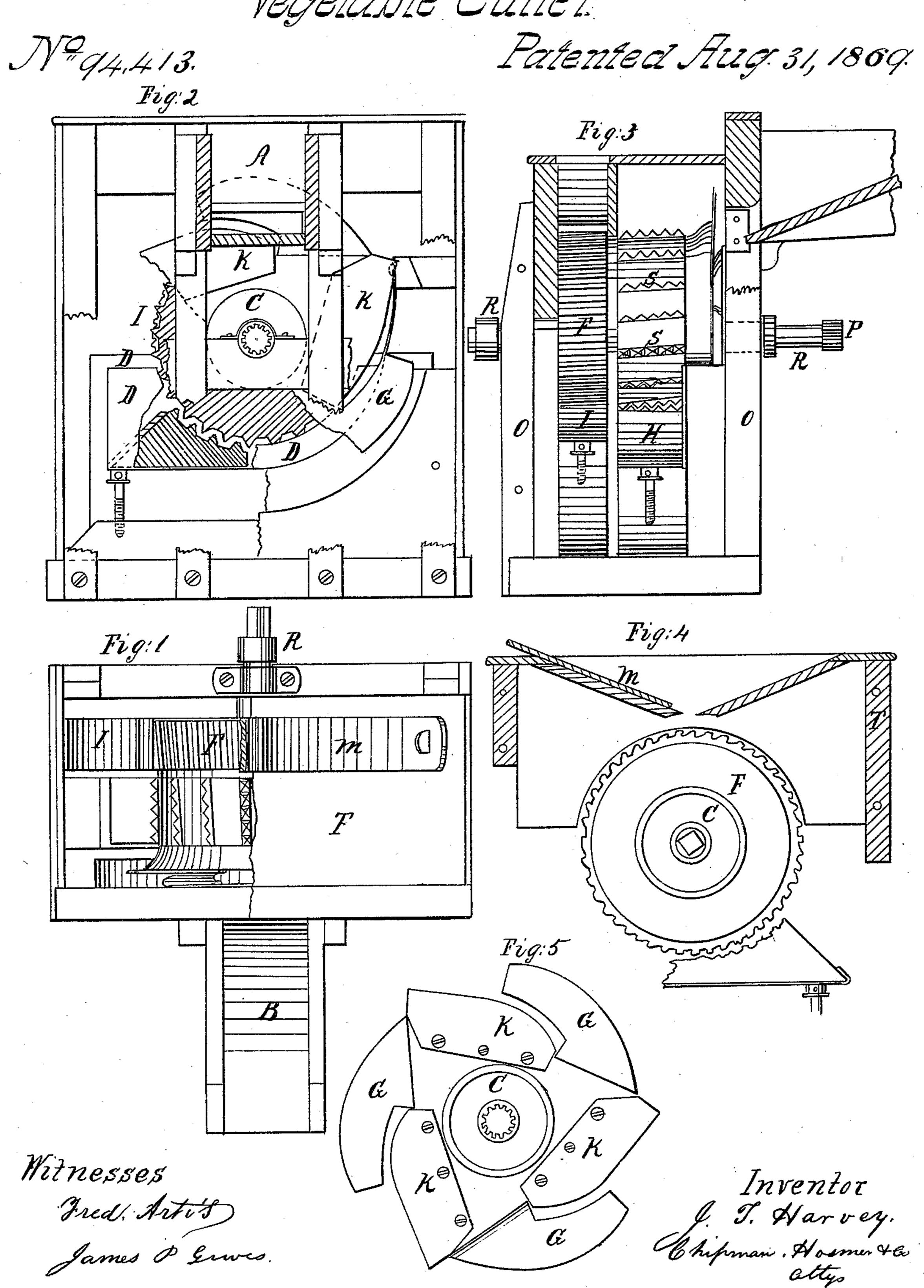
J.J. Harvey. Vegetable Cutter.



Anited States Patent Office.

JAMES T. HARVEY, OF MURRYSVILLE, PENNSYLVANIA.

Letters Patent No. 94,413, dated August 31, 1869.

VEGETABLE-CUTTER AND FEED-GRINDING MACHINE.

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

To all whom it may concern:

Be it known that I, JAMES T. HARVEY, of Murrysville, in the county of Westmoreland, and State of Pennsylvania, have invented a new and valuable Improvement in Feed-Grinding Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, in the drawings, is a plan view of my invention, one-half of the covering-table broken off.

Figure 2 is a back view, partially sectioned. Figure 3 is a side view, the top table in section. Figures 4 and 5 are details.

My invention relates to means for cutting and preparing feed for animals; and

It consists, mainly, in a novel arrangement of devices intended to serve as efficient means for the pur-

pose mentioned. The letter O, of the drawings, represents a box or case, having a removable cover, T, in which case and

cover I arrange the devices hereinafter mentioned. The letter C represents a cylinder, usually of chilled iron, having upon its periphery the rough grindingteeth S and corrugated steel band F, as shown.

The teeth S are designed for grinding coarse feed, and the corrugated band is intended for grinding small or fine substances.

The letters K represent a series of curved knives, arranged upon the cylinder, as shown, and the letters G are guards connected therewith, and which serve as aids in cutting the feed and conducting it in the proper direction after the cutting is done.

The letters R represent pulleys, for bands applied to the shaft of cylinder C, and the letter P, a pinion on said shaft. These last-mentioned devices are intended to serve for gearing-purposes.

The letter I represents a corrugated French burr concave block of stone to match the corrugated band F, and the letter H, a toothed iron plate to match the toothed surface of the cylinder represented by S.

The letters D represent metallic plates arranged in the box, on one side of the cylinder, as shown, and which serve to conduct the feed from the band F and the teeth S, respectively, to the delivery-spout of the apparatus.

The letter B represents the box in which the feed is placed for cutting by the knives K, and the letter A is an adjustable steel plate, with a sharpened inner end, adapted to work in conjunction with knives K in cutting feed.

The letter M represents a hopper, in which I place small grains or substances intended to be finely ground.

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

The feed-preparing machine herein described, having cylinder C, knives K, band F, guides D, plate A, burr-stone I, and plate H, constructed and arranged substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

JAMES T. HARVEY.

Witnesses:

JOHN W. RIDDLE, S. M. RIDDLE. .