

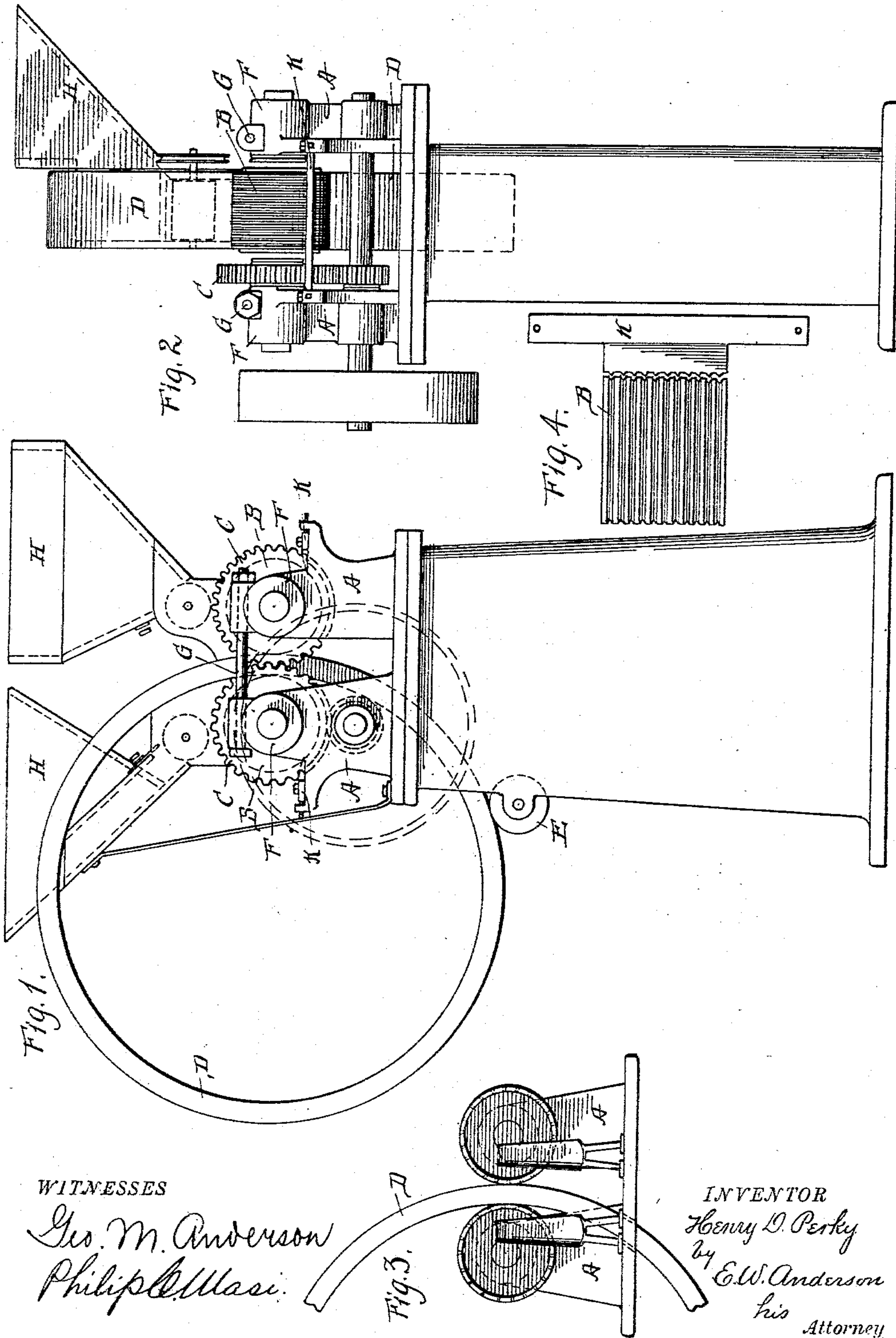
(No Model.)

H. D. PERKY.

ROLL MACHINE FOR PREPARATION OF CEREALS FOR FOOD.

No. 533,554.

Patented Feb. 5, 1895.



WITNESSES

Geo. M. Anderson
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UNITED STATES PATENT OFFICE.

HENRY D. PERKY, OF DENVER, COLORADO, ASSIGNOR TO THE CEREAL MACHINE COMPANY, OF SAME PLACE.

ROLL-MACHINE FOR PREPARATION OF CEREALS FOR FOOD.

SPECIFICATION forming part of Letters Patent No. 533,554, dated February 5, 1895.

Application filed April 28, 1894. Serial No. 509,407. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. PERKY, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented new and useful Improvements in Roll-Machines for the Preparation of Cereals for Food; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 of the drawings represents a side view of the machine. Fig. 2 is a front view. Fig. 3 is a detail showing perforated rolls. Fig. 4 is a detached view of one of the grooved rolls and its discharging comb.

The object of this invention is to provide a machine for the economic reduction of cereals in the grain form to a desirable article of food, without detracting from their natural nutritious qualities, and for the better preparation of the same for general use.

In the accompanying drawings, the letter A designates the frame of the machine.

B, B represent two reducing rolls having engaging gear wheels C, C, and operating mechanism therefor. Between the cylindrical surfaces of the reducing rolls extends a compressing ring or annular traveling band plate D, of comparatively large diameter, said ring having a roller bearing at E.

F, F represent the bearings for the reducing rolls, which may be braced in position by means of tie-bolts G, whereby also, the rolls may be adjusted to proper contact with the traveling ring plate.

H H indicate the hoppers in which the grain, suitably prepared by boiling and drying to proper condition for the action of the rolls, is placed, and whereby the grains in whole form are fed between the reducing rolls and the intermediate ring plate. As the rolls are rotated, the ring plate revolves and compresses and mashes the grain into the fine circumferential grooves of the rolls, which carry the material until discharged in the

shape of continuous fine threads or shreds by scrapers K. In this action the outer bran layers, the gluten layer and the interior starchy portions of the grain are intimately commingled, and an article of food is presented having all the nutritive qualities and virtues of the various parts of the grain berry, in convenient form for immediate consumption, or for shaping and preparation in various ways for baking.

The circumferential grooves of the reducing rolls are fine, or small in cross-section, and preferably of V-form, and the discharging combs or scrapers have fine teeth of similar contour adapted to enter said grooves, and discharge the threads or shreds of food as they are brought around by the rotation of the rolls. The grooved rolls are especially adapted for the reduction of small grain such as wheat and barley.

In reducing Indian corn, I design sometimes to employ in place of the grooved rolls, hollow rolls having their cylindrical walls provided with a number of perforations, through which, by the action of the traveling ring plate the material is forced in the shape of small threads, which can be discharged from the hollow rolls by means of inclined scoops or other suitable device.

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

1. In a reducing machine, the combination with the reducing rolls and their hoppers of the intermediate traveling ring plate, and its bearing roller, substantially as specified.

2. In a reducing machine, the combination with circumferentially grooved reducing rolls, their hoppers, and discharging combs or scrapers, of the traveling ring-plate extending between the reducing rolls, substantially as specified.

In testimony whereof I affix my signature in the presence of two witnesses.

HENRY D. PERKY.

Witnesses:

J. M. STANLEY,
HARRY C. JAMES.