

H. D. PERKY, DEC'D.

L. SPARKS, ADMINISTRATOR.

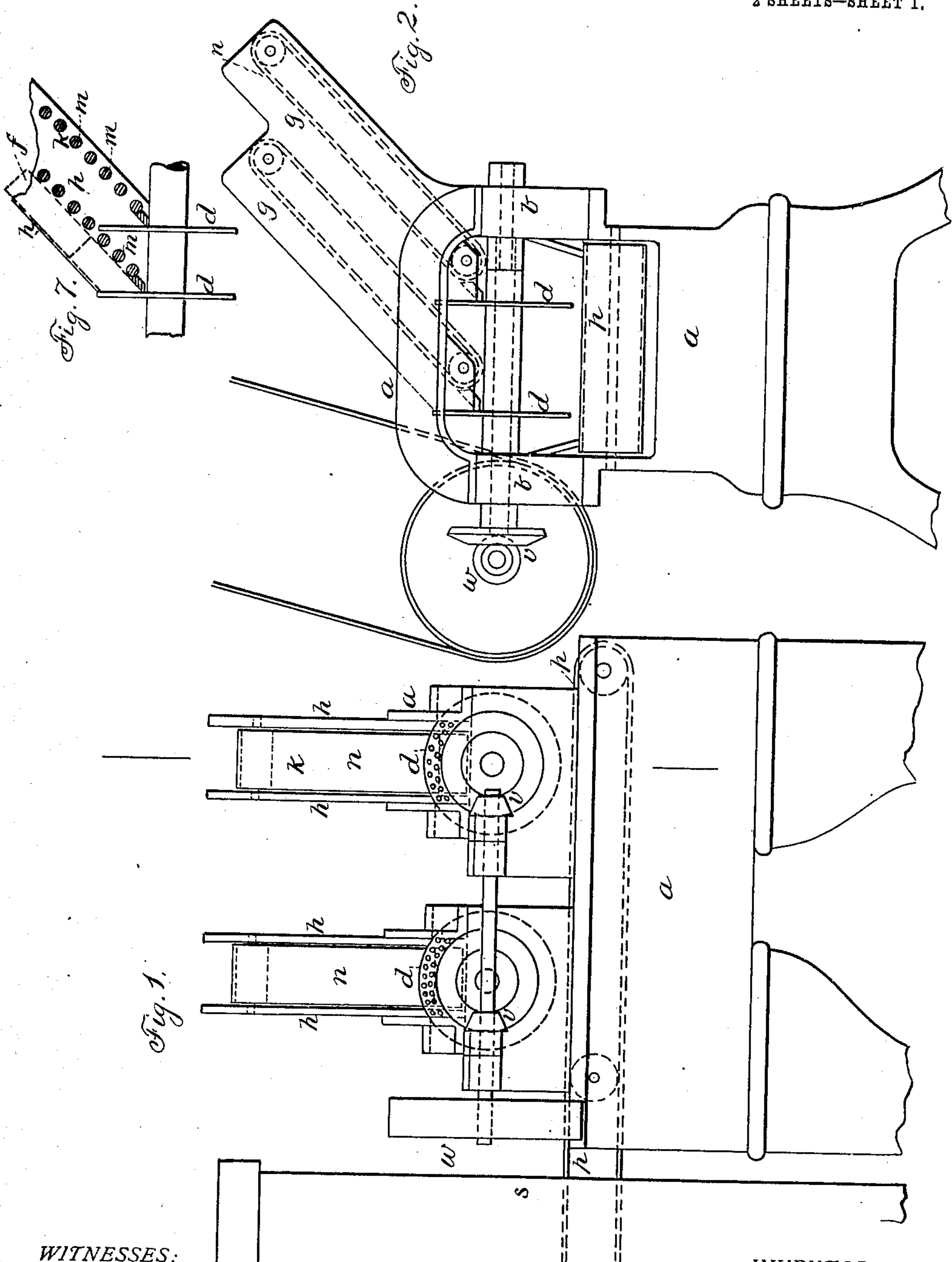
REDUCING DISK MACHINE FOR THE MANUFACTURE OF CEREAL PRODUCTS.

APPLICATION FILED APR. 2, 1906.

913,671.

Patented Feb. 23, 1909.

2 SHEETS—SHEET 1.



WITNESSES:

George M. Anderson.
Stuart Hilder

INVENTOR.

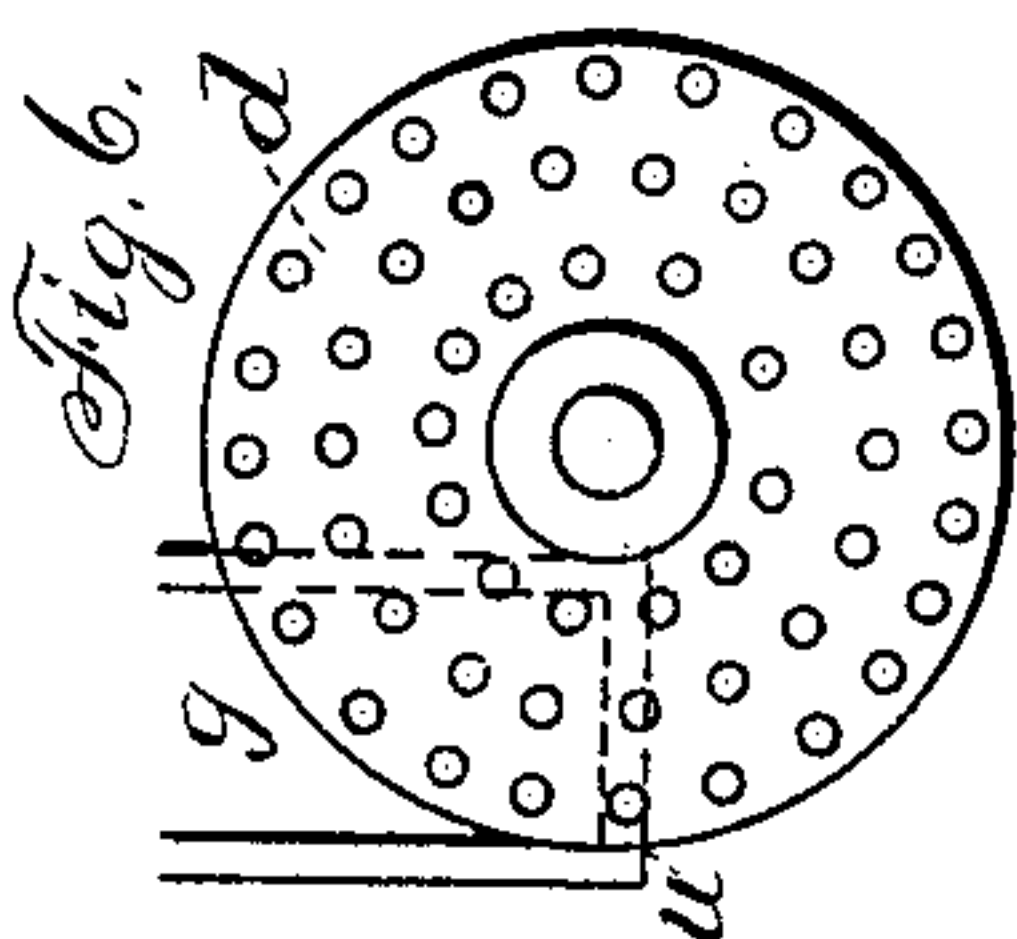
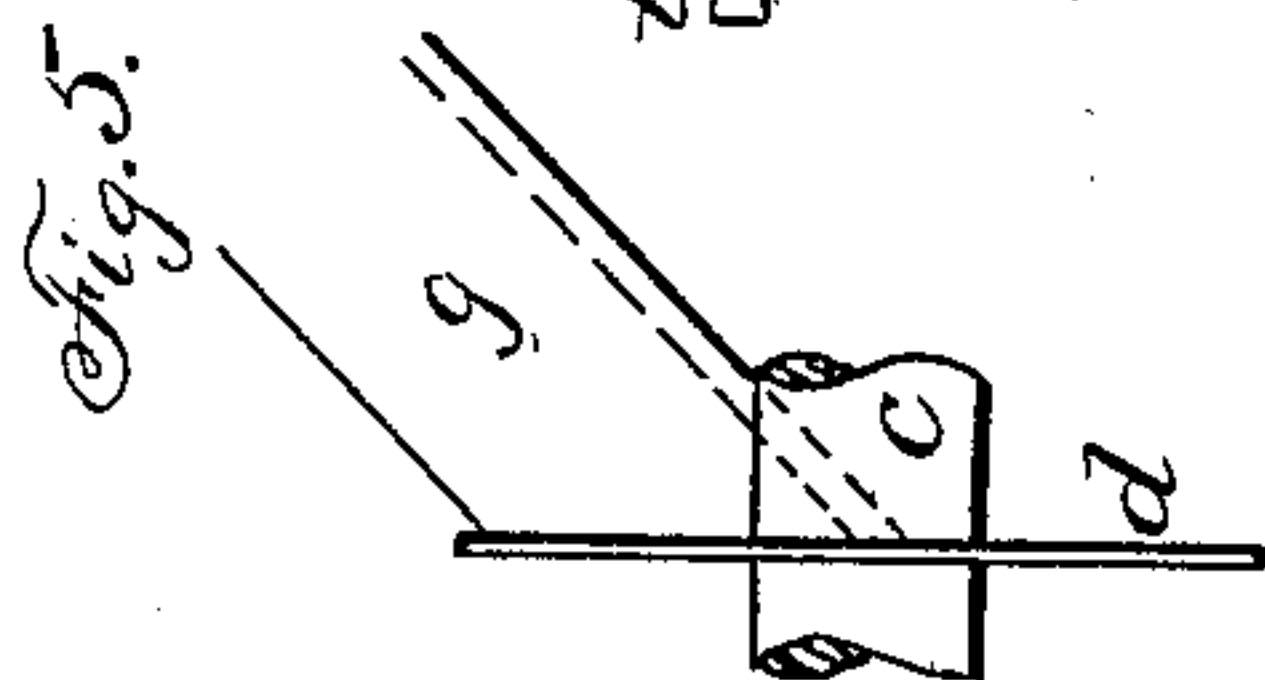
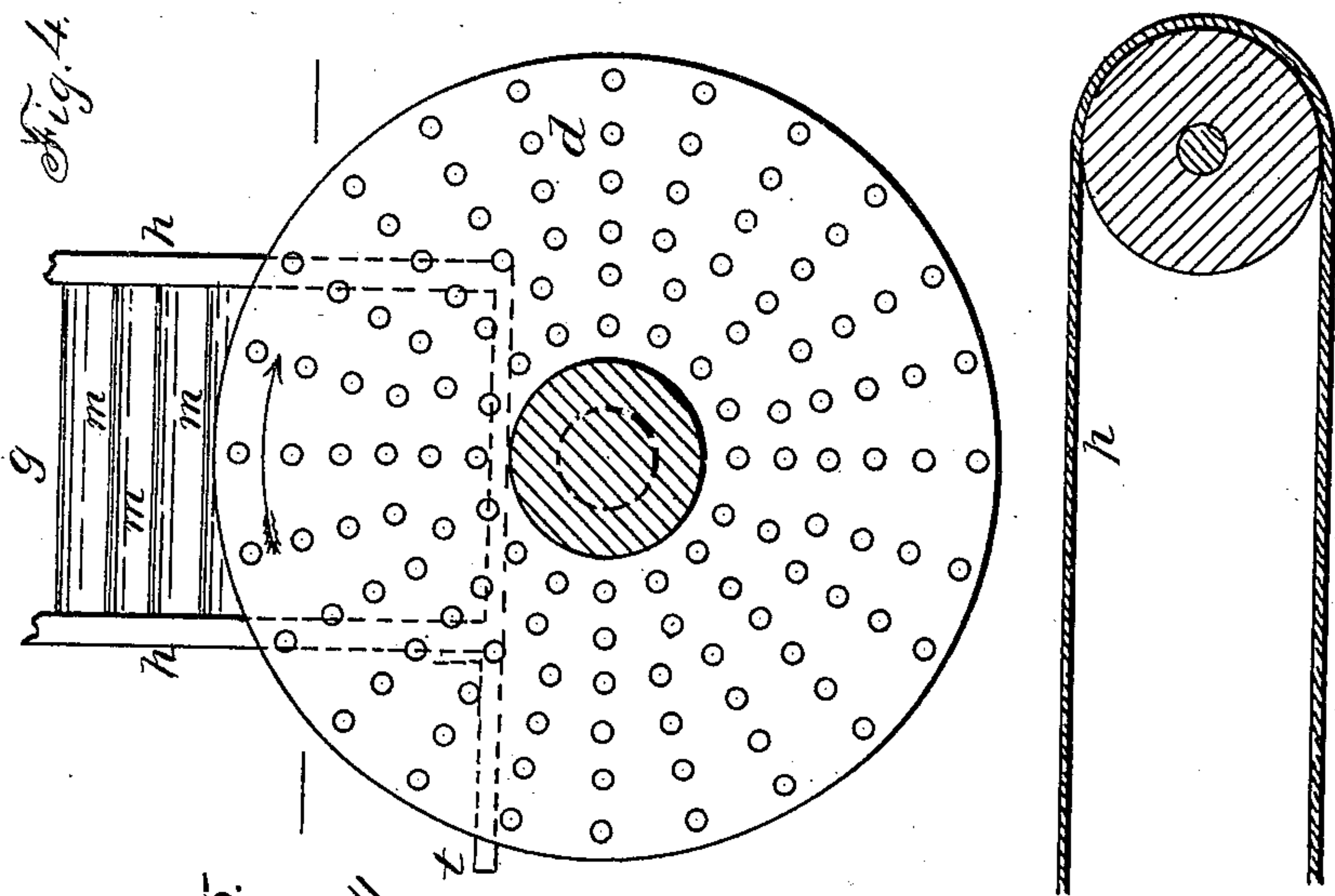
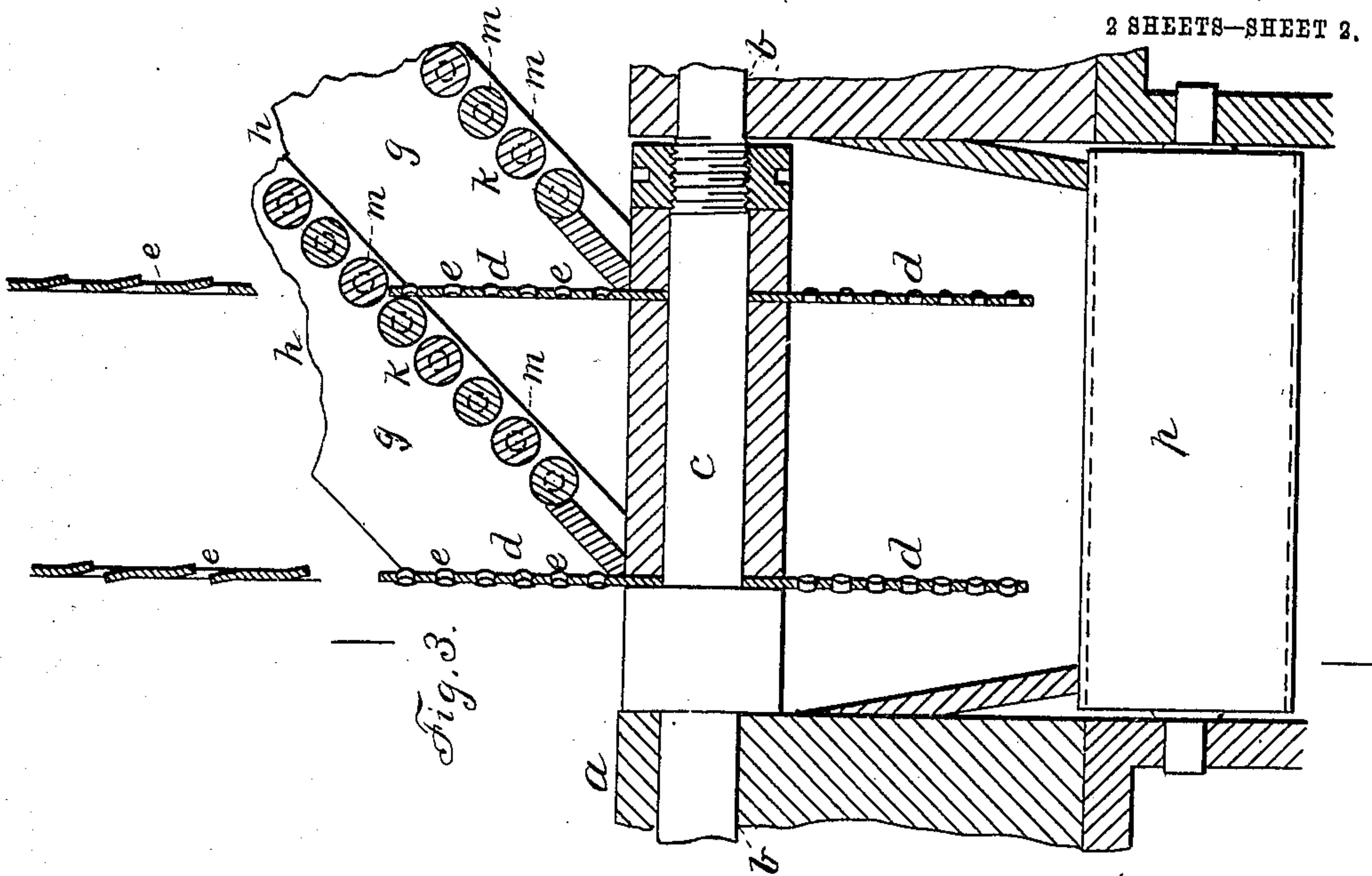
Henry D. Perky
BY E. W. Anderson
his ATTORNEY.

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UNITED STATES PATENT OFFICE.

HENRY D. PERKY, OF GLENCOE, MARYLAND; LABON SPARKS ADMINISTRATOR OF SAID
HENRY D. PERKY, DECEASED.

REDUCING DISK MACHINE FOR THE MANUFACTURE OF CEREAL PRODUCTS.

No. 913,671.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed April 2, 1906. Serial No. 309,280.

To all whom it may concern:

Be it known that I, HENRY D. PERKY, a citizen of the United States, and resident of Glencoe, in the county of Baltimore and State of Maryland, have made a certain new and useful Invention in Reducing Disk Machines for the Manufacture of Cereal Products; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side view illustrating the invention. Fig. 2 is an end view. Fig. 3 is a transverse sectional view. Fig. 4 is a longitudinal sectional view. Figs. 5, 6, and 7 are detail views.

The invention relates to means for reducing cereal material to thin elongated or filament form, and it consists in the novel construction and combinations of parts as hereinafter set forth.

The object of the invention is to provide means whereby the reduction of the material to thin elongated forms of the character desired can be effected in a rapid and continuous manner.

In the accompanying drawings, illustrating the invention, the letter *a*, designates frame work, having bearings *b*, for a shaft *c*, carrying one or more circular disks *d*, of thin metal, such disks having a number of small perforations *e*, made therein, such perforations having thin edges, usually slightly projecting toward the feed, and being designed to serve during the rotation of the disks for the reduction of the material.

The material upon which this machine is mainly designed to operate consists of ground grain, which has been cooked, with the proper amount of water for absorption, in a water tight vessel until it is in proper condition, and has hardened or set into form as a plastic solid, which is designed to be prepared in the form of bricks or cakes of suitable shape for feeding, as at *f*.

An inclined chute or feed-way *g*, is provided in connection with the frame *a*, said chute having side walls *h*, and bottom *k*.

In order to facilitate the feed, the chute is designed to be provided with a moving bottom, which may consist of rollers, as at *m*, or a moving band, as at *n*.

Under the reducing disk *d*, is provided a receiver *p*, preferably in the form of a traveling band, which may be extended to pass through a drying chamber at *s*.

The inclined chutes *g*, are designed to be of sufficient length to accommodate several bricks of the material, in order that their combined weight will produce sufficient pressure at the feed end for reduction. Sometimes it may be advisable to use auxiliary means of pressure in the form of weights, or by means of spring, or other suitable devices for the purpose.

In order to remove the product from the disk, a discharging device *t*, may be employed, this being simply an arm or finger bar extending from the chute wall at the feed end. When the chute is located laterally with reference to the disk, as indicated in Fig. 6, the feed end *u*, of the chute will act as a discharger.

These devices are designed to be multiplied in gang form for increasing the amount of the product; and, to that end, several reducing disks, at proper intervals apart for the introduction of chutes, are provided on the same shaft, as indicated in Fig. 2 of the drawing. And several shafts parallel to each other may be placed in the same machine, each shaft carrying several reducing disks. Power may be applied to a drive shaft *w*, geared to the several shafts of the reducing disks, as indicated at *v*.

The material in the chutes is fed thereby to the disks, which by means of their rotation and their perforations rapidly reduce it to thin elongated forms as it is caused to pass through the perforations. These forms are discharged on the conveyer, whereby they may be carried through a drier for effecting absorption of their moisture.

What I claim and desire to secure by Letters Patent is—

1. In a machine of the class described, the combination with a vertical perforated reducing disk, of an inclined feed chute, a traveling discharge conveyer below said disk, and means for rotating said disk.

2. In a machine of the class described, the combination with a plurality of parallel shafts, their gearing, and a plurality of perforated reducing disks on each shaft, of a
5 plurality of series of feed chutes, a receiving conveyer, and means for rotating said reducing disks.

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

HENRY D. PERKY.

Witnesses:

PETER MULCAHY,
BESSIE MULLINEAUX.