

(No Model.)

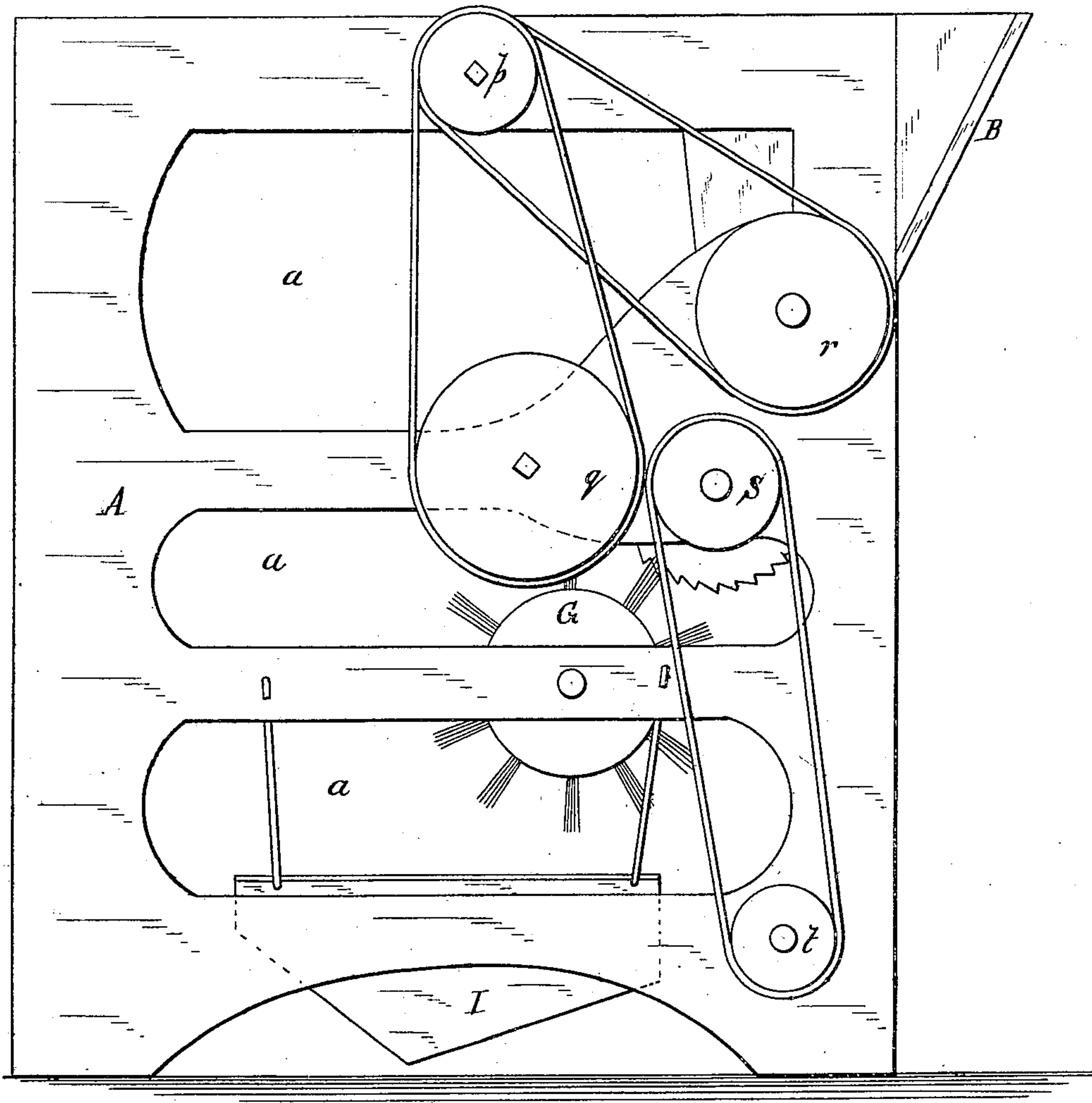
2 Sheets—Sheet 1.

S. KITCHENS, Sr.
Cotton Seed Huller.

No. 234,584.

Patented Nov. 16, 1880.

Fig. 1.



WITNESSES:

Henry N. Miller
C. Sedgwick

INVENTOR:

S. Kitchens Sr.
BY *Mum & Co*
ATTORNEYS.

(No Model.)

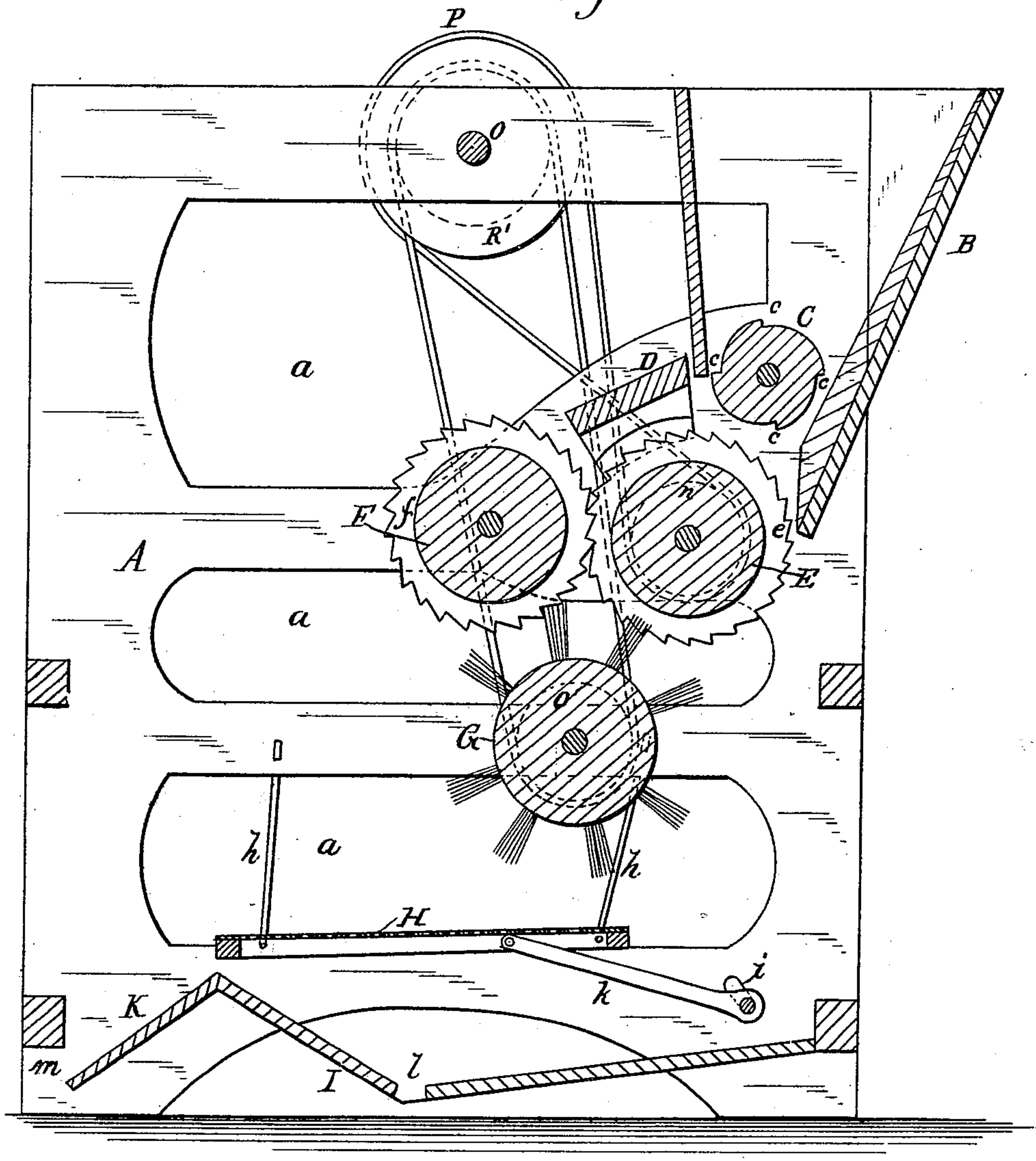
2 Sheets—Sheet 2.

S. KITCHENS, Sr.
Cotton Seed Huller.

No. 234,584.

Patented Nov. 16, 1880.

Fig. 2.



WITNESSES:

Henry N. Miller
C. Sedgwick

INVENTOR:

S. Kitchens Sr.

BY

Mum & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SEABORN KITCHENS, SR., OF GIBSON, GEORGIA.

COTTON-SEED HULLER.

SPECIFICATION forming part of Letters Patent No. 234,584, dated November 16, 1880.

Application filed May 11, 1880. (No model.)

To all whom it may concern:

Be it known that I, SEABORN KITCHENS, Sr., of Gibson, in the county of Glascock and State of Georgia, have invented a new and Improved Cotton-Seed Huller, of which the following is a specification.

The object of my invention is to produce a simple easily-constructed machine for removing the hulls from cotton-seeds and separating the hulls and kernels, the latter being then in good condition to express the oil therefrom, leaving an oil-cake free from waste, which is used for feeding animals.

My machine is clearly illustrated in the accompanying drawings, in which—

Figure 1, Sheet 1, is an elevation of the side of the machine opposite the driving-pulley; and Fig. 2, Sheet 2, is a central vertical section of the machine.

Similar letters of reference indicate corresponding parts.

A A are the sides of the case. B is the hopper, the bottom of which is closed by the feed-roll C, having grooves *c*, which feed the seed to the hulling mechanism. Immediately below the feed-roll is the burr E, which is a cylinder having upon its circumference the saws *e*, placed about a quarter of an inch apart. In front of the burr E is a similar burr, F, whose shaft is journaled in the sides of the case at a somewhat higher point than the shaft of the burr E. The saws of the burr F are placed so as to alternate with the saws *e* of the burr E. In front of the feed-opening of the hopper, and just above the burr E, is the concave D, which is provided with oval-shaped saw-teeth. Immediately beneath the burrs is the brush G. Below the brush is the sieve H, suspended by spring-hangers *h*. The sieve is slightly inclined toward one end, as shown, and receives motion from the crank-shaft *i* through pivoted connecting-rods K. That part, I, of the bottom of the case below the sieve is inclined from the ends to the point *l*, where it has a slot or opening, as shown. That part of the floor at the lowest part of the sieve is inclined, as shown at K, its lower part terminating at the opening *m*.

The shaft O, from which power is applied to the machine, has its bearings in the sides of

the case, and carries at one end the two-part band wheel or pulley P R, and at the other end the band-wheel *p*.

From the band-wheel P R motion is communicated by belts to the shafts of burr E and the brush G by belt-pulleys *n* and *o*, respectively. From the pulley *p* belts communicate motion to the burr F and the feed-roll C by belt-pulleys *q* and *r*. The sieve-driving crank-shaft receives its motion through its pulley *t* from a belt-wheel, *s*, on one end of the shaft of the burr E. The burrs E and F revolve in opposite directions, the driving-belt of the burr E being crossed.

The driving-pulleys, through which motion is given to the burrs, are so proportioned that the burr E is revolved at about five times the speed of the burr F.

The machine being put in motion, the seed is fed by the roll C to the burr E, by which it is carried forward, and most of the hulls removed by the action of the saws *e* and the teeth of the concave D. The seed passes thence between the burrs E and F, by the teeth of which the hulling is completed, the hulls and kernels falling upon the sieve H. Portions of the hulls and kernels adhering to the burrs are swept off by the brush G. By the action of the sieve the hulls and kernels are separated. The kernels fall upon the inclined floor I and pass out of the machine at *l*. The hulls fall off the lower part of the sieve and are conducted by the incline K out of the machine through the opening *m*.

The saws of the burrs are similar to those used in cotton-gins, but are differently dressed.

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

1. The burr E, having saws *e*, combined with the toothed concave D, and burr F, having saws *f*, as and for the purpose specified.

2. In combination with the burrs E F, the brush G and sieve H, as and for the purposes set forth.

SEABORN KITCHENS, SENR.

Witnesses:

GEORGE W. HAWKINS,
TIMOTHY L. KITCHENS.