

J. PERKINS.  
Cotton Seed Huller.

No. 55,701.

Patented June 19, 1866.

Fig. 1.

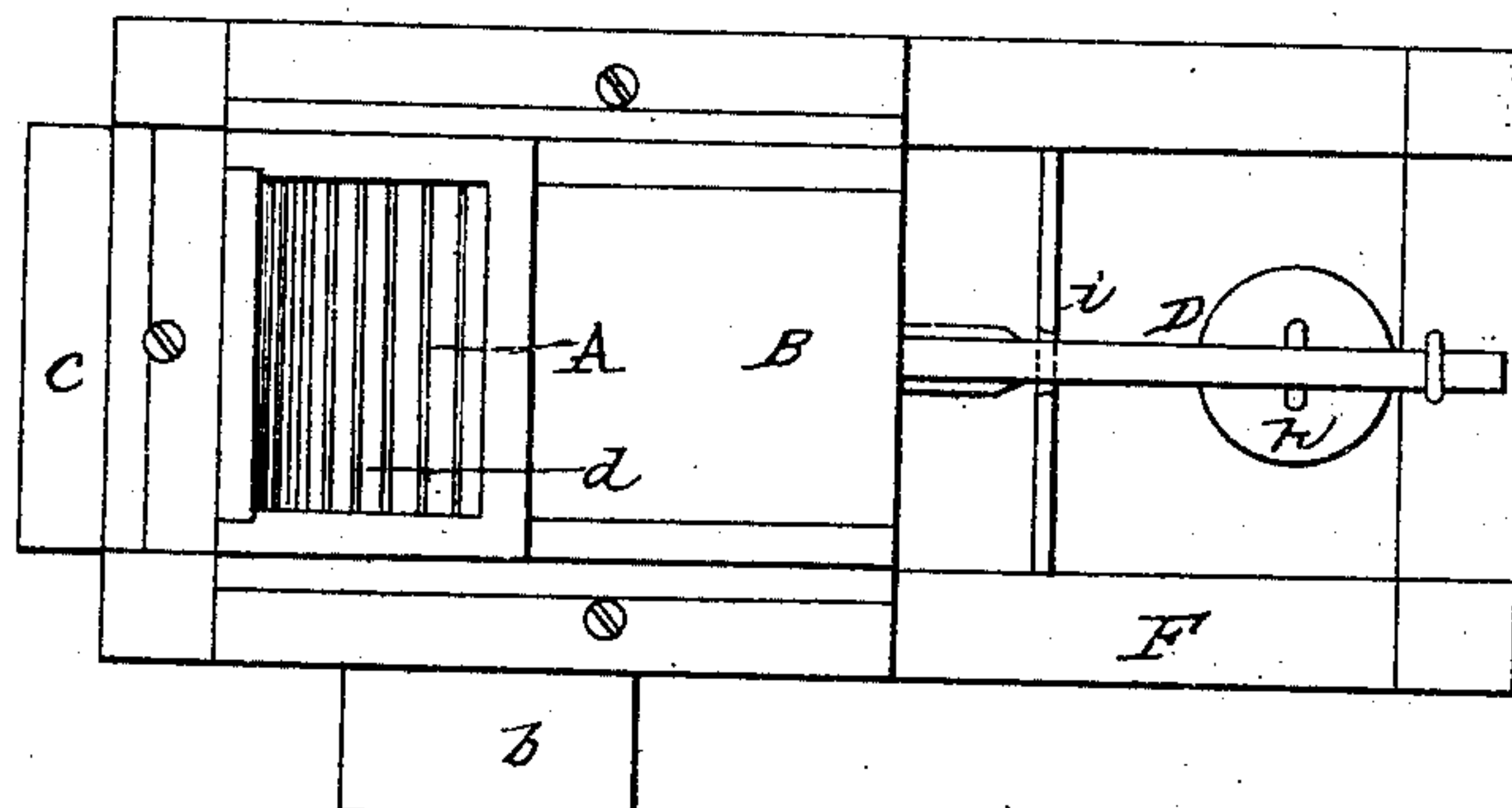


Fig. 2.

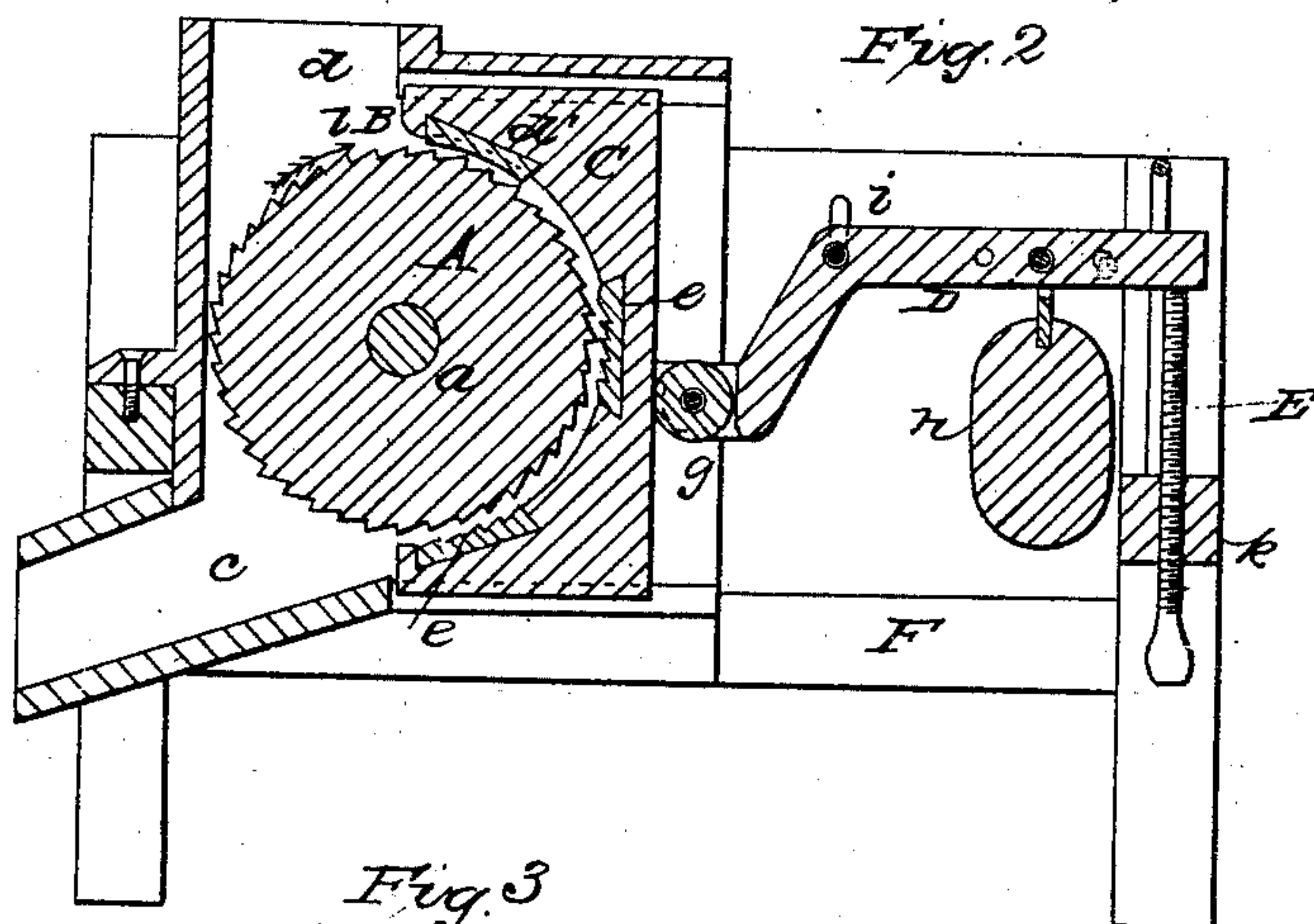


Fig. 3.

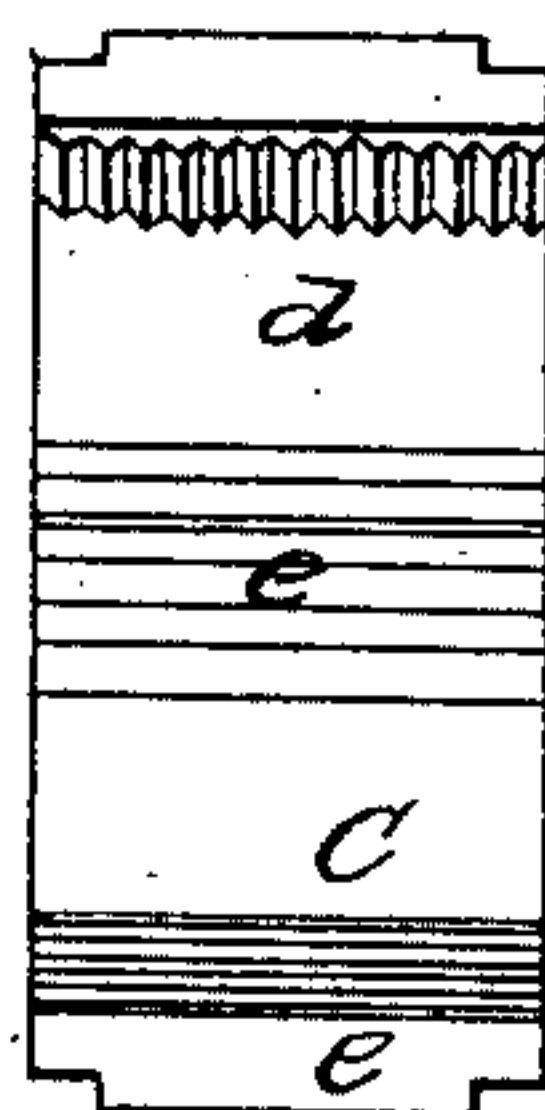


Fig. 4.



Witnesses  
Samuel A. Perkins  
George Andrews

Inventor  
John Perkins.  
by his attorney.  
R. H. Eddy

# UNITED STATES PATENT OFFICE.

JOHN PERKINS, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN COTTON-SEED HULLERS.

Specification forming part of Letters Patent No. 55,701, dated June 19, 1866.

*To all whom it may concern:*

Be it known that I, JOHN PERKINS, of the city and county of Providence, and State of Rhode Island, have invented an Improved Machine for Hulling Cotton-Seed; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a longitudinal section, of it. Fig. 3 is an inner side view of the self-adjusting shell.

In such drawings, A represents a cylinder, fluted on its outer surface or made with teeth formed as represented. This cylinder, mounted on a horizontal shaft, *a*, provided with a driving-pulley, *b*, is arranged within a case or chamber, B, having a receiving-mouth, *d*, at top, and also having a discharging-spout, *c*, at bottom, as shown in Figs. 1 and 2. The front of the said chamber is a movable shell, C, which partially envelops the circumference of the cylinder, and has a series of vertical ribs or teeth, *d'*, arranged in the upper part of its interior surface, such ribs being shown in cross-section in Fig. 4. It also has ranges *e e* of other ribs or teeth disposed so as to extend across it and below the said upper series. This shell should be so supported as to be capable of being moved away from and toward the cylinder.

A lever, D, carrying a friction-roller, *g*, in its shorter arm, and having a weight, *h*, suspended from its longer arm, turns on a fulcrum-rod, *i*, and is arranged as represented, in order that such roller may bear against the shell and the weight operate to press the shell toward the cylinder. The longer arm of the said lever rests on the upper end of a screw, E, which is screwed upward through a cross-bar, *k*, of the

frame F, by which the operative parts of the machine is supported. This screw serves to regulate the distance of approach of the shell toward the cylinder.

In operating with this machine the cotton-seed to be hulled is thrown into the mouth of the case while the cylinder is in rapid revolution in the direction denoted by the arrow *l*. The seed will first be carried against the upper set of ribs of the shell, and by such will be properly arranged for presentation to the action of the remaining or other sets of ribs and the cylinder. The upper set of ribs operates to split the hulls lengthwise and arrange the seeds so that they may pass end foremost into the space between the cylinder and the other sets of ribs. This is found to effect the hulling of the seeds to much better advantage than when horizontal ribs only are used in the shell. Furthermore, the shell, by being self-adjusting, can adjust itself to any bunch or mass of seeds or any stones, nails, or foreign substances that may get between it and the cylinder. Were it not for this property of the shell, such foreign matter would be likely to break the ribs or teeth.

I do not claim a toothed cylinder and a toothed shrouding arranged in case; but

I claim—

The combination and arrangement of the series of vertical ribs *d'* with the shell C, its series of horizontal ribs *e*, the cylinder A, and its case B, the whole being to operate together substantially as specified.

JOHN PERKINS.

Witnesses:

G. H. WASHBURN,  
F. P. HALE, Jr.