A. OLCOTT.

Hackling Machine.

No. 5,373. Patented Nov. 20, 1847.

Fig. 3

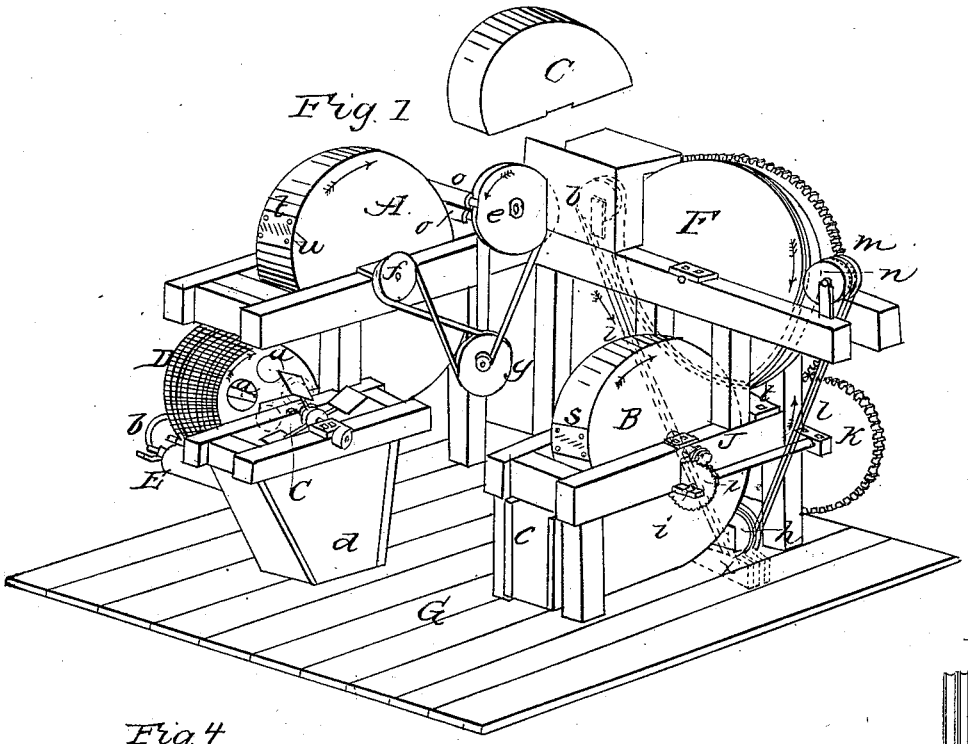


Fig. 1

Fig. 5

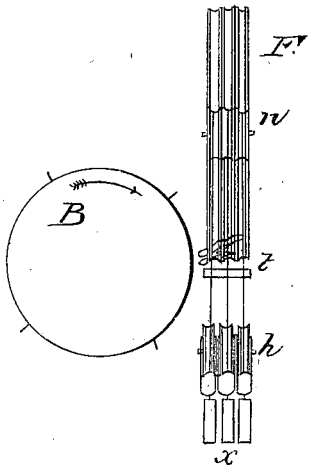


Fig. 4

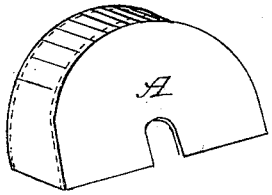
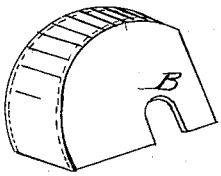


Fig. 2



UNITED STATES PATENT OFFICE.

ADRIAN OLCOTT, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN MACHINERY FOR PREPARING HUSKS FOR MATTRESSES.

Specification forming part of Letters Patent No. **5,373**, dated November 20, 1847.

To all whom it may concern:

Be it known that I, ADRIAN OLCOTT, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Machine for Preparing Corn-Husks for Mattresses, Cushions, and such like Articles; 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, in which—

Figure 1 is a perspective view. A is a cylinder two feet in diameter, six inches thick, with four or more rows of teeth set in plates at an angle of forty-five degrees, and should revolve in the direction of the arrow at the rate of three hundred revolutions per minute. B is a cylinder two feet in diameter and six inches in thickness, with four or more rows of teeth set as on A, and should revolve rapidly in the direction of the arrow. C is a fan, which revolves rapidly in the box *d*. D is a hollow cylinder, about twelve inches in diameter and nine inches on the face, the sides being made of wood or metal and the face of wire-cloth. The side next the fan C is perforated with four apertures, (two represented by dotted lines and two by *a a*,) and should fit up close to the box *d*, inclosing the fan C, (the upper part of which is represented by Fig. 3,) so that by a rapid revolution of the fan the air is driven out of the box *d*, which is open below, and thus creates a current, which, passing through the wire covering of the cylinder D, carries off the dust and litter, which would otherwise be mixed up with the husks. E is a small wooden roller, which revolves upon the bottom of the cylinder D. F is a cylinder about two feet in diameter and four inches wide on the face, in which there are three scores or grooves one inch deep. G is the floor of the house in which the machine is placed. *c* is an aperture in the end of a box, in which the cylinder B revolves. *d* is the lower part of the box, in which the fan C is placed. *b*, *e*, *f*, and *g* are drums. *i*, *k*, and *m* are cog-wheels. *j* is a trundle working on *i*. *o o* are fluted rollers one and a half inch in diameter. *p* is a box, open on the top and on the end next *o o*, and in which is a pulley corresponding with *n*, and represented by the dotted lines. *n* is a pulley about six inches in diameter, with grooves or scores corresponding with the grooves or scores in F. *h* represents three pulleys, each with a groove or score corresponding with the grooves or scores in F and *n*, and to each of these pulleys there is attached a weight, *x*. (Represented by dotted lines.) *l* represents three cords passing over the pulley *n*, and also over the pulley in the box *p*, and under the cylinder F and the pulley *h*. *r* and *s* are the teeth set in plates on the face of the cylinders A and B. *t* is a board six inches wide, placed under the cylinder F at the point where the husks come in contact with the teeth of the cylinder B, and is called the "knobbing-board." Its use is to hold the knobs in place, that they may be torn away by the teeth in B.

Fig. 2 is the cover of the cylinder B. Fig. 3 is the cover of the fan C. Fig. 4 is the cover of the cylinder A. Fig. 5 is a sectional view showing the face of the cylinder F of the pulleys *n* and *h*, the weights *x*, and the cords *l*, and the manner in which the husks are carried by the cylinder F and the cords *l* to the knobbing-board *t*, where they are knobbed by the teeth of the cylinder B.

The husks are first placed between the pulley *n* and the cylinder F, in such manner as to lie square across the face of F, with the knobs projecting toward B over the edge of F, which, revolving in the direction of the arrow, carries them upon the cords *l*, where they are held firmly and carried to the knobbing-board *t*. There the knobs are torn off by the teeth in the cylinder B, and discharged through the aperture *c*. From *t* the husks are carried over the pulley in the box *p* and deposited on a platform. The leaves thus prepared are then placed between the fluted rollers *o o*, which, revolving at the rate of forty revolutions per minute, bring them in contact with the teeth of the cylinder A, which, revolving at the rate of three hundred revolutions per minute, cuts them into narrow strips and throws them against the wire cylinder D, where the current of air produced by the fan C draws the dust and fine particles through the wires and discharges them through an opening in the bottom of the box *d*, and causes the strips thus prepared to adhere to the outer surface of the wire cylinder D until they are removed by

coming in contact with the rollers E and placed on the floor G.

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

The combination of the machinery by which the husks are held and knobbed, as hereinbefore described, and also the combination of the machinery by which the husks are slit and cleansed, as hereinbefore described.

ADRIAN OLCOTT.

Witnesses:
W. G. LYON,
JAMES CRAGER.