

UNITED STATES PATENT OFFICE.

WILLIAM H. DELAMARE, OF DEPTFORD, ENGLAND.

IMPROVEMENT IN COTTON-SEED CLEANERS.

Specification forming part of Letters Patent No. 127,224, dated May 28, 1872.

Specification describing a new and useful Improvement in Cotton-Seed Cleaners, invented by WILLIAM H. DELAMARE, of Deptford, in the county of Kent, England.

The object of this invention is to furnish convenient and efficient means for cleaning cotton-seed of the fibers of cotton which adhere thereto after the process of ginning has been completed; and the invention consists of a machine having a cylinder or drum which revolves within a hollow casing, the surface of said cylinder and the inner surface of the casing being metal, and roughened by punching or other means; and in combination therewith the means for introducing and discharging the seed and the cotton fiber, as will hereinafter be more fully described.

In the accompanying drawing, Figure 1 represents a side elevation of the machine in section on the line x x of Fig. 2. Fig. 2 is a vertical cross-section taken on the line y y of Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents a frame, which may be made of either wood or metal. B is a cylinder or drum on the shaft C, supported by journalboxes on the frame, as seen at DD. EE represent a driving and a loose pulley. The surface of the cylinder B is metal, and it is roughened by punching, so that it is like a grater. There are various ways by which this may be done, and I do not, therefore, confine myself to any particular mode. F is the casing, which is made in two or more concave parts, G being the lower part or semicircle, and H the upper part. This casing is made of metal, and is roughened the same as the cylinder. The casing is placed concentric with the cylinder, with a space, I, between the two of a width greater than the greatest diameter of the cotton-seed—say one-half an inch or over-so that in no case will the seed be crushed. J is the hopper, which extends nearly or quite the length of the cylinder, which may be provided with a valve or slide, worked automatically or otherwise, to regulate the quantity of seed introduced and to intermit the flow of the seed, as may be desired. On one side of the hopper or other part of the outer casing, and forming a portion thereof, is a wire-cloth screen, K, through which fibers of cotton, as they are torn from the seed, are discharged. L is an aperture or slot in the lower part of the casing for the discharge of the seed. It is closed by a slide or valve, M, and opened from time to time, as may be necessary, automatically or otherwise.

The space I between the cylinder and the casing may be divided into two or more compartments by means of rings with roughened surfaces attached to the cylinder or to the casing, so that the seed may be operated upon in one or all of the compartments at the same time.

I do not limit or confine myself to the precise form or arrangement of the parts described, as they may be varied in many ways without departing from my invention.

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

A revolving cylinder, B, provided with a grater-formed surface, in combination with a stationary surrounding case, H, having corresponding grater-formed surface on the inside, and the screen K, as and for the purpose described.

London, 27th January, 1872. W. H. DELAMARE.

Signed by WM. HENRY DELAMARE in the presence of—

HUGO REINHARD,
ROBERT HARRIES,
Both of 1 New Broad Street Court.