(No Model.)

E. M. SCOTT.

RAG CLEANING MACHINE.

No. 342,392. Patented May 25, 1886.

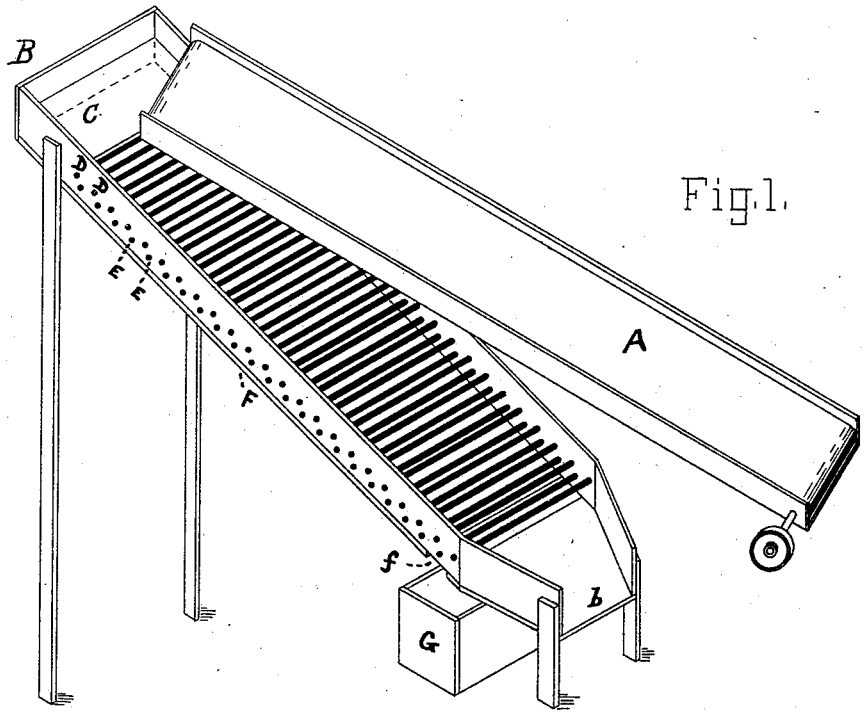

Fig. 1.

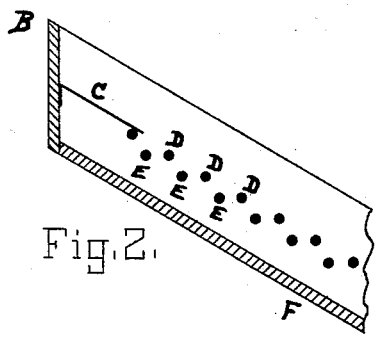

Fig. 2.

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UNITED STATES PATENT OFFICE.

EARL M. SCOTT, OF SOUTH HADLEY FALLS, MASSACHUSETTS.

RAG-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 342,392, dated May 25, 1886.

Application filed February 1, 1886. Serial No. 190,393. (No model.)

To all whom it may concern:

Be it known that I, EARL M. SCOTT, a citizen of the United States, residing a South Hadley Falls, in the county of Hampshire and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Rag-Cleaning Machines, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in machines for removing metals, straw, dust, and other foreign substances from cut rags used in the manufacture of paper, and the objects of my improvements are, first, to provide for the removal of substances injurious to paper that have escaped the sorting and dusting processes; and, second, to provide a machine of improved simplicity and durability that will effectively perform the service specified. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention, and Fig. 2 is a sectional view on an enlarged scale of certain parts thereof.

Similar letters refer to like parts throughout the several views.

In Fig. 1, A is a carrier of ordinary construction for the purpose of delivering the rags to my cleaning-machine when the location of the supply renders such a device necessary. The other piece of apparatus, shown in Fig. 1, is my improved rag-cleaning machine, in which B is an inclined trough which receives the rags at its upper end and allows them to slide to the lower end.

C is a smooth plate of sheet metal or other suitable substance for the rags to strike upon when they enter the machine, for the purpose of reducing the friction and preventing the accumulation of the rags at this point.

In the trough B is arranged a grating or rack composed of a series of rods, D D E E, &c., over which the rags must slide, and by means of which the cleaning is effected. The rods D D, &c., are upon one plane, while the rods E E, &c., are in a different plane and are located under the spaces between the rods D D, &c., as shown in Figs. 1 and 2.

By the arrangement described the rags in their passage down the trough B are continually falling upon one of the lower rods E, rolling again over one of the upper rods D, and so on in succession. The space between the rods is not sufficient to allow the rags to fall through, but will allow the passage of dust, metals, &c. By this device, therefore, these injurious substances are removed, the separation being assisted by the rolling and falling action described.

Below the grating there is a bottom, F, of the trough B, for the purpose of catching the substances which are separated. Said bottom F is cut away at *f*, so that the refuse slides down the bottom F until this opening is reached and then empties into the box G. The cleaned rags leave the trough at *b*, and may be allowed to empty there, or may be taken by a carrier and delivered to a second cleaning-machine like that described, if desired.

The size and position of the rods forming the grating described may be proportioned to suit the quality of material to be treated, but in all cases follow the principle of alternation in different planes, as described.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

The combination, in a rag-cleaning machine, of an inclined trough having a smooth receiving-plate, an inclined grating formed of series of rods located alternately and situated in two or more planes, a delivery-passage for the cleaned rags, a bottom for the reception of the refuse, and a delivery opening for the refuse, all substantially as and for the purpose set forth.

EARL M. SCOTT.

Witnesses:
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