No. 859,968.

PATENTED JULY 16, 1907.

E. M. McNAMARA. ERASER PAD CLEANER.

APPLICATION FILED OCT. 27, 1906. 2 SHEETS-SHEET 1. Attest! Triveritor: Edward M. M. Namara,

E. M. MCNAMARA.

ERASER PAD CLEANER.

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2 SHEETS-SHEET 2. Attest: John Enders. Henry Moz. Inventor: Edward M. M. Namara, By Robert Runs Attorneym

UNITED STATES PATENT OFFICE.

EDWARD M. McNAMARA, OF CHICAGO, ILLINOIS.

ERASER-PAD CLEANER.

No. 859,968.

Specification of Letters Patent.

Patented July 16, 1907.

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To all whom it may concern:

Be it known that I, Edward M. McNamara, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cleaning Eraser-Pads, of which the following is a specification.

This invention relates to apparatus for cleaning the eraser pad used in blackboard exercises, and has for its object to provide a simple and efficient structural arrangement and combination of parts whereby the cleaning operation is effected in a rapid and efficient manner, and which while providing a very compact arrangement of parts is adapted to operate upon a multiplicity of eraser pads at one and the same time, all as will hereinafter more fully appear.

In the accompanying drawings:—Figure 1, is a vertical longitudinal section, on line x-x—Fig. 2. Fig. 2, is a vertical transverse section, on line x^1-x^1 Fig. 1. 20 Fig. 3, is a detail section on line x^2-x^2 , Fig. 1. Fig. 4, is a detail plan view of one of the resilient beater blades.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 is the supporting base upon which is arranged a closed drum shaped housing 2, the lower end of which is formed into a receiving chamber for the heavier particles of chalk, etc, dislodged in the operation of the apparatus.

3, is a removable drawer fitting the receiving chamber aforesaid, and adapted to receive the chalk particles, etc, above referred to.

4, are a series of air inlets formed in the sides of the housing 2, for the admission of air in the practical operation of the apparatus.

5, is an outlet pipe or duct connected to the lower part of the housing 2, and extending to an exhaust fan or other air mover; such duct being adapted to carry away the fine dust from the interior of the apparatus during actual use.

6, are standards arranged at the sides of the housing 2, to form bearings for the operating shaft 7 of the apparatus; such shaft extends transversely through the housing and is provided with an operating crank 8 at one end, as shown.

9, is a revoluble wheel or carrier mounted on the shaft 7, and having its periphery formed with a series of tangential faces 10, connected together by radial faces 11, to impart a serrated form to such periphery and afford a series of supporting planes for the series of eraser pads 12 operated upon.

13, are resilient catches secured to the sides of the carrier 9, and adapted to engage the sides of the eraser pads 12, to hold the same in proper position while undergoing the cleaning operation.

14, are a series of lift pins or stude secured radially in

the periphery of the carrier 9, and located near the radial faces 11, of the carrier as shown.

15, are a series of air passages extending obliquely from the sides of the carrier 9, and opening through 60 the radial faces 11 aforesaid, to permit the passage of currents of air to the faces of the eraser pads to aid in the removal of dust in the operation of the apparatus.

16, are a plurality of resilient beaters secured at one end in the interior of the housing 2, with their free ends 65 adapted to impact against the faces of the eraser pads secured to the periphery of the carrier 9. In the present construction the lift pins 14, are adapted to ride under and lift the free ends of said beaters, and at the proper time move from under the beaters, which 70 through their resiliency are adapted to strike a sudden blow upon the faces of the eraser pads, and an efficient removal of the dust therefrom.

In the preferred form of the beaters 16, the free end of each beater will be provided with a series of perfora- 75 tions 17, and longitudinal corrugations 18, with a view to effect a more perfect dislodgment of the dust from the eraser pads; and such free ends of each beater will be provided with an end notch 19 arranged in the path of the lift pins 14, and adapted to permit the escape of 80 such pins from under the beater, in time to effect an impact of the forward end of the beater with the forward end of an eraser pad.

20, are stirrup pieces arranged intermediate of the fixed and free ends of the resilient beaters 16, and 85 adapted to limit the extent of vibration of the free ends thereof.

21, are pull rods attached to the free ends of the beaters 16 and having on their exterior ends pull knobs or handles by means of which they are manipulated.

22, are stay bars pivoted on the exterior of the housing 2, and adapted to engage under the pull knobs aforesaid, to hold the respective beaters in a dormant condition, after they have been manually drawn into such position by the operator.

23, are a plurality of brushes arranged in the interior of the housing 2, with their bristles arranged in the path of the series of eraser pads mounted on the carrier 9, and adapted to remove therefrom the dust previously loosened up by the aforesaid beaters.

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Access to the interior of the housing and its contained parts may be had in any usual manner; in the construction shown said housing is formed by an upper and lower section connected together at one side by a hinge 24, and at the other side by a suitable catch 25, as shown. 105

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

1. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein, 110 a series of resilient beaters secured to the housing, and a series of lifting pins mounted on the carrier.

2. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein, a series of resilient beaters secured to the housing, a series of brushes mounted in the housing intermediate of the 5 beaters, and a series of lifting pins mounted on the carrier.

3. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein and formed with a serrated periphery the tangential faces of which constitute supports for the eraser pads, a series 10 of resilient beaters secured to the housing, and a series of lifting pins mounted on the carrier.

4. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein and formed with a serrated periphery the tangential faces 15 of which constitute supports for the eraser pads, a series of resilient beaters secured to the housing, a series of

spring clips on the carrier for engagement with the eraser pads, and a series of lifting pins mounted on said carrier. 5. In an apparatus for cleaning eraser pads, the combi-20 nation of a housing, a revoluble carrier journaled therein and formed with a serrated periphery the tangential faces

of which constitute supports for the eraser pads, orifices extending obliquely from the sides of said carrier and having exits above the tangential faces aforesaid, a series of

resilient beaters secured to the housing, and a series of lifting pins mounted on the carrier.

6. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein, a series of resilient beaters secured to the housing and hav-30 ing their free ends formed with corrugations, and a series of lifting pins mounted on the carrier.

7. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein, a series of resilient beaters secured to the housing and hav-35 ing their free ends formed with corrugations and a series of perforations, and a series of lifting pins mounted on the carrier.

8. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein, a series of resilient beaters secured to the housing and hav- 40 ing central notches at their free ends, and a series of lifting pins mounted on the carrier.

9. In an apparatus for cleaning eraser pads, the combination of a housing, a revoluble carrier journaled therein, a series of resilient beaters secured to the housing, pull 45 rods connected to the free ends of said beaters, a latch piece engaging said pull rods to lock the beaters in a dormant condition, and a series of lifting pins mounted on the carrier.

10. In an apparatus for cleaning eraser pads, the combi- 50 nation of a housing, a revoluble carrier journaled therein, a series of resilient beaters secured to the housing, stirrups arranged intermediate of the fixed and free ends of said beaters, and a series of lifting pins mounted on the carrier.

11. In an apparatus for cleaning eraser pads, the combination of a closed housing formed with a receiving chamber at its lower end, a drawer in said chamber, a rèvoluble carrier journaled in said housing, a series of resilient beaters secured in said housing, and a series of lifting pins 60 mounted on the carrier.

12. In an apparatus for cleaning eraser pads, the combination of a closed housing formed with a receiving chamber at its lower end, an outlet pipe connected to said chamber, a revoluble carrier journaled in said housing, a series 65 of resilient beaters secured in said housing, and a series of lifting pins mounted on the carrier.

Signed at Chicago, Illinois, this 23rd day of October 1906.

EDWARD M. McNAMARA.

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Witnesses:

ROBERT BURNS, HENRY MOE.