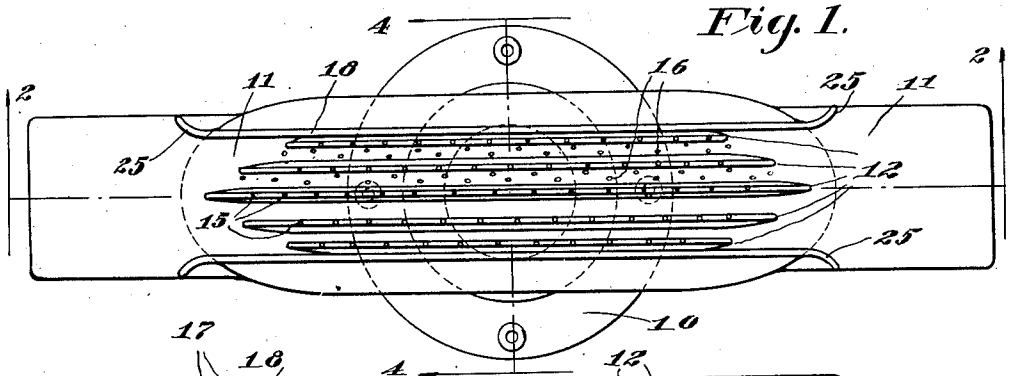
Sept. 24, 1929. R. W. GOTT 1,729,253

ERASER CLEANER

Filed Nov. 26, 1927

Fig. 1.



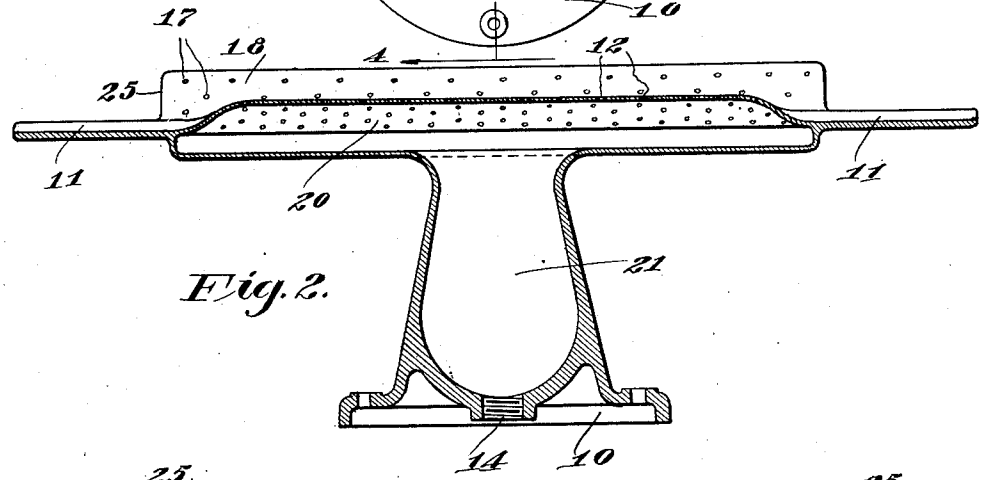


Fig. 2.

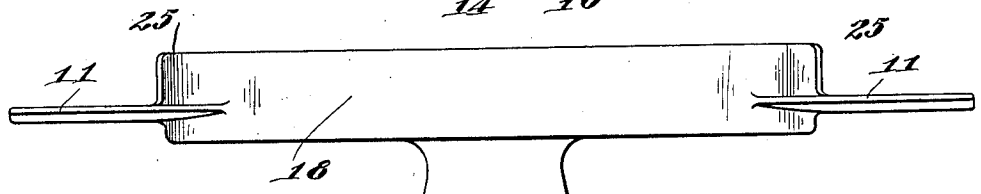


Fig. 3.



Fig. 4.

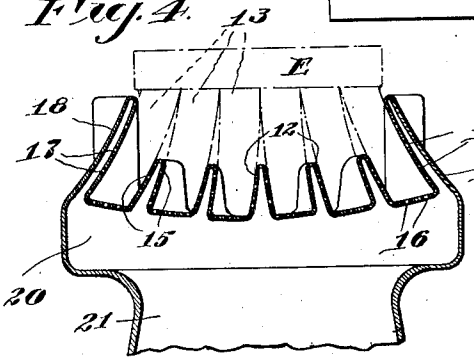


Fig. 5.

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UNITED STATES PATENT OFFICE

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ERASER CLEANER

Application filed November 26, 1927. Serial No. 235,979.

My invention relates to improvements in eraser cleaners such as are in use in public schools or other places where chalk crayons are used in connection with the well known so called, black-boards.

A common type of eraser in more or less general use to-day is illustrated in the accompanying drawings at Figure 5, in which it will be noted that several strips of material are stitched or otherwise bound together to form a substantially rigid body but yet be resilient enough for all practical purposes, the material most commonly used is felt or similar fibrous composition.

Erasers in constant use as in public schools, require cleaning daily, and in large schools where several hundred erasers are in daily use, the labor problem involved becomes of considerable moment. The old hand method of beating the dust from these erasers which was a long laborious process has been substituted in many places with machines in which brushes have been utilized in much the same manner as in the old and familiar type of carpet sweapers in which a revolving brush is brought in contact with the bottom of the eraser, and in some cases vacuum has been added to carry off the dust raised by the brush.

The principal object of my improvement is, to provide an eraser cleaner that will clean all three sides of the eraser and also in between the several strips of felt or other material composing the body of said eraser, and said cleaning operation to be combined in one continuous operation; to reduce the time required in said cleaning operation. Another object of this invention is, to get away from complicated mechanisms requiring constant attention such as those requiring electric motors or hand operated mechanical means for operation of moving parts, and to provide a simple fool-proof device that might be operated by those not accustomed to the use of mechanical apparatus.

I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view showing the table or track on which the eraser is propelled either from the right or left hand as the case may be, and the separator fins which act as spreaders between the several layers comprising the eraser.

Figure 2 is a central vertical section taken on the line 2, 2, of Figure 1 showing one of the spreaders in section.

Figure 3 is a side elevation.

Figure 4 is a transverse vertical section taken through the upper part of the track and spreaders and showing in broken lines, an eraser passing through the cleaner.

Figure 5 is a perspective view of a type of eraser used in this cleaner.

Similar numerals refer to similar parts through the several views.

At 10, I have designated a base upon which and integral with said base, is supported a table or track 11 which is provided with a series of raised spreaders 12.

The purpose of the spreaders 12 is, to separate the several sections of the eraser as illustrated by the numeral 13 in Figs. 4, and 5, in such a manner that a vacuum applied at the base 10 through the opening 14 will draw all chalk dust from between the sections of the eraser E through openings 15 provided in the spreaders 12. More openings are provided on the track 11 and designated at 16 for cleaning the bottom surfaces of the eraser sections 13, and still more openings are provided at 17 located upon the inner sides of the extreme outer sides 18 of the track 11.

The openings 15, 16, and 17 are preferably located in a more or less staggered manner so that when an eraser is passed across the table or track 11, the entire surfaces in contact have passed over several of these openings, thus, assuring the cleaning of the entire surfaces of the eraser that may be impregnated with chalk dust. It will also be noted that openings 15, 16, and 17 communicate directly with a vacuum chamber 20, which in turn directly communicates with a vacuum chamber 21 in the base. Any suitable source of vacuum supply may be attached to the opening 14, such as a flexible hose line attached to a vacuum pump in the basement of a building.

It will be further noted by an inspection of Figure 4 that, I have concaved the track surface 11 coincide with the contour of the

bottom of the eraser which becomes convexed upon the entrance of the spreaders 12 between the several sections 13, of the eraser E.

At 25, I have provided guides curved outwardly to facilitate the entrance of the eraser sections 13 between the side members 18 of the track 11. It will also be noted that I have arranged the spreaders 12 in such a manner that the center spreader enters first followed by two more located one on either side of the center spreader and finally by the two remaining spreaders, located one on either side of the preceding spreaders. The object in entering these spreaders at different times with respect to the advancement of the eraser along the track 11 is, to make it easy to propel the eraser into engagement with said spreaders by entering one or two at a time, and also to make possible the complete spreading of the eraser sections without using a horizontally curved spreader which would otherwise be necessary, greatly increasing the manufacturing difficulties.

In operation, the eraser E is placed upon the track 11 and propelled through the cleaner from one end to the other, and during such operation, a vacuum is applied to the chambers 20 and 21 through opening 14 and thereby drawing out such chalk dust as may be on the bottom of the eraser, between its sections or on its sides. This cleaning operation may be accomplished by the use of both hands of the operator with an eraser in either hand. In this manner an operator is enabled to pass the erasers through the cleaner alternately, right and left hand, as fast as he can pick the erasers up.

Having thus described my invention, what I claim as new, is:

1. In a vacuum eraser cleaner comprising in combination, a central hollow base comprising a vacuum chamber, a horizontally disposed oblong table attached to the top of said base, the two opposite ends of which extend outwardly from said base in a cantilever manner, the top surface of said table being slightly concaved as viewed from a point above said table, a series of substantially vertical hollow fins upstanding from said concaved top surface of said table and extending in a direction parallel to the long side of said oblong table, said fins being further provided with perforations in their tops and sides and adapted to communicate directly with said vacuum chamber located in said base and means provided for connecting a vacuum supply line to said vacuum chamber.

2. In combination in a vacuum eraser cleaner, a substantially vertically disposed hollow base comprising a vacuum chamber, an oblong table horizontally disposed and integral with the top of said base and further provided with several parallel hollow fins projecting above the top surface of said table and extending in a direction parallel to the long sides of said oblong table, said top surface of table and said hollow fins upstanding therefrom being provided with perforations adapted to directly communicate with said vacuum chamber located within said base.

3. In a vacuum eraser cleaner, a table comprising a concaved surface as viewed from its top and provided with a series of upstanding wedge shaped spreader fins, a base attached to the under side of said table comprising a bottom and side walls of substantially closed design and adapted to form a vacuum chamber, said vacuum chamber directly connecting with the outside atmosphere through perforations located in the sides and tops of said fins and also in the concaved surface of the table top intermediate the said fins, means for connecting a vacuum supply line to the bottom of said base and directly communicating with said vacuum chamber.

4. In combination, in a vacuum eraser cleaner, a base comprising a vacuum chamber communicating with a hollow oblong table horizontally disposed and attached to the top of said base, said table being further provided with a series of parallel, hollow, upstanding flanges adapted to communicate with said vacuum chamber in said base by means of perforations located in the sides and tops of said hollow flanges.

5. In combination, in a vacuum eraser cleaner, a base having formed therein a substantially closed chamber, an elongated table attached to said base, said table being provided with longitudinally disposed and upwardly extending hollow fins adapted to admit air through openings provided thereon, said table being further provided with side members each outwardly extended at its lower portion and inwardly extended at its top with ends extending vertically from said table, said chamber communicating with said hollow fins, and said base being further provided with an opening communicating with said chamber whereby air may be drawn from said chamber.

In witness whereof, I subscribe my name this 19th day of November, 1927.

RODNEY W. GOTT.