A. D. NICHOLS.

VACUUM ERASER.

APPLICATION FILED JUNE 21, 1917.

1,283,269.

Patented Oct. 29, 1918.

FIG. 1.

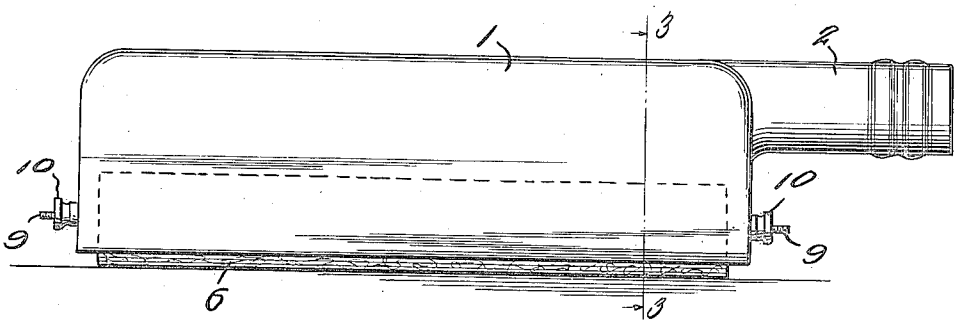


FIG. 2.

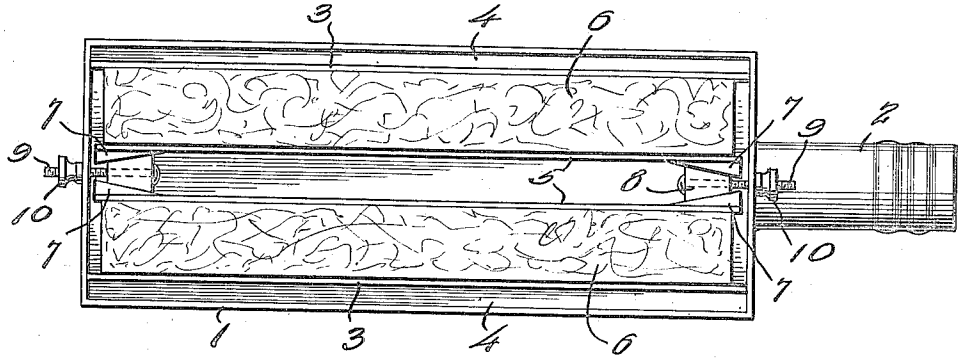
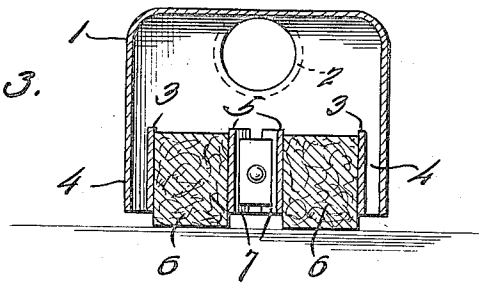


FIG. 3.



WITNESSES

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ANDREW D. NICHOLS, OF HARLOWTON, MONTANA.

VACUUM-ERASER.

1,283,269. Specification of Letters Patent. Patented Oct. 29, 1918.

Application filed June 21, 1917. Serial No. 176,218.

To all whom it may concern:

Be it known that I, ANDREW D. NICHOLS, a citizen of the United States, residing at Harlowton, in the county of Wheatland and State of Montana, have invented certain new and useful Improvements in Vacuum-Erasers, of which the following is a specification.

This invention relates to new and useful improvements in erasers for blackboards and the like and the principal object of the invention is to provide means for preventing the chalk dust from flying about while the erasers are being used.

Another object of the invention is to create a suction about the erasers so as to gather up the dust particles and prevent them from leaving the eraser.

A further object of the invention is to provide a casing in which the erasers are placed, with means for connecting the casing with a vacuum system so that the chalk dust is drawn into the casing and carried therefrom into the said system.

Another object of the invention is to provide a device of this character, which is simple and durable in construction, reliable and efficient in operation and one which can be manufactured and placed upon the market at a minimum cost.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawings, wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a side view of the invention.

Fig. 2 is a bottom view thereof.

Fig. 3 is a section on line 3—3 of Fig. 1.

In these views 1 represents the casing, having its bottom open and provided at one end with a tubular extension 2 which is adapted to be connected to any suitable form of vacuum creating means. At its bottom the casing is provided with a pair of stationary partitions 3, each partition extending from one end of the casing to the other and being located a slight distance from the side of the casing so as to leave a space 4 between the partition and the casing and this space connects the interior of the casing above the partitions with the outside. 5 indicates a pair of movable partitions arranged centrally of the casing and extending parallel with the stationary partitions, and these partitions are adapted to hold the erasing felts 6 between themselves and the stationary partitions. These movable partitions are moved toward the stationary partitions so as to grip the felts by means of a wedge like arrangement which consists of an inclined block 7 located on each end of each movable partition and of a pair of wedge shape blocks 8 at each end of the casing and engaging the inclined surfaces on the pairs of blocks as shown in Figs. 2 and 3. The blocks 8 are adjusted by means of the screw bolts 9 carried by the blocks and extending through the casing and actuated by means of the thumb nuts 10. The movable partitions are of slightly less length than the casing and the same is true of the felts, so that a space is formed at each end of the casing which communicates with the interior of the casing, and a space is also left between the two movable partitions, so that each felt is surrounded by a narrow space leading from the bottom of the casing to the interior thereof.

It will be seen that the felts are clamped in position by the movable partitions and said partitions will permit the felts being replaced by new ones when they become worn.

When the eraser is being used and the vacuum system is connected therewith the chalk dust will be drawn up through the spaces surrounding the felts into the interior of the casing and from here it will be drawn into the system. Thus the danger of the person using the eraser breathing air laden with chalk dust is eliminated and at the same time the felts are kept clean and clear of the chalk.

It is thought from the foregoing that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make slight changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

I claim as my invention:

1. An eraser comprising a casing having an open bottom, stationary partitions extending from end to end across the bottom

of the casing and spaced from the sides thereof, movable partitions extending parallel to the stationary partitions, felt strips held between said partitions, and wedging means for adjusting said movable partitions to clamp the felt strips in place.

2. An eraser comprising a casing having an open bottom, stationary partitions extending longitudinally across the bottom of the casing and spaced from the sides thereof, movable partitions extending parallel to the stationary partitions, felt strips held between said partitions, said movable partitions being spaced from each other and from the ends of the casing and the felts being of less length then the casing and means for moving the movable partitions toward the stationary partitions to clamp the felt strips therebetween.

3. An eraser comprising a casing, movable and stationary partitions therein, felts held between said partitions and means for adjusting the movable partitions, said means comprising blocks on the movable partitions having inclined faces, wedge shaped blocks engaging said faces and means for adjusting the position of said wedge shaped blocks.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW D. NICHOLS.

Witnesses:
S. E. JOHNSON,
S. H. LABRIE.