July 26, 1966 G. F. CARLSON 3,262,145

BLACKBOARD ERASER

Filed Sept. 20, 1965

FIG. 1

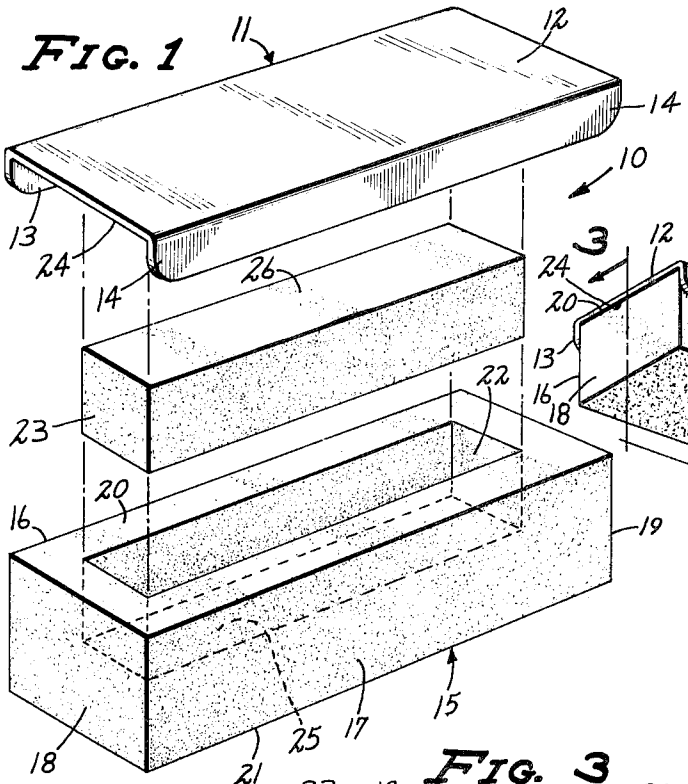


FIG. 2

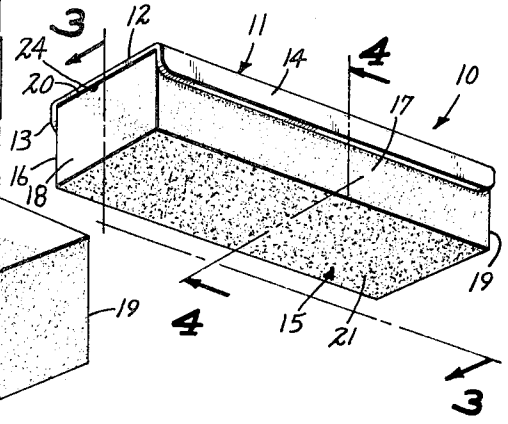


FIG. 3

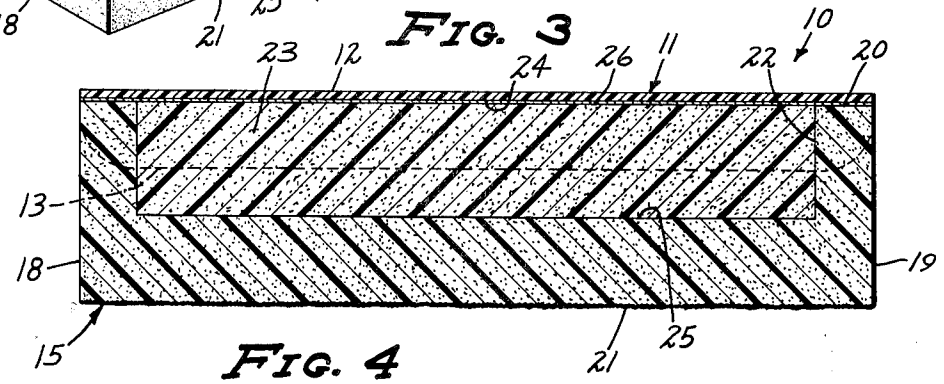
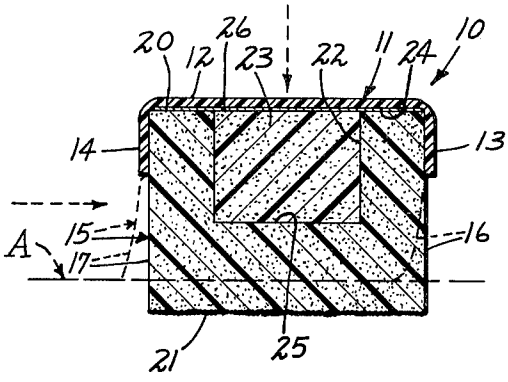


FIG. 4



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BLACKBOARD ERASER

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1 Claim. (Cl. 15—244)

My invention relates generally to erasers and more particularly to erasers of the type used to remove chalk dust from blackboards or the like.

It is a primary object of my invention to provide a blockboard eraser which is light in weight and extremely inexpensive to produce.

It is another object of my invention to provide a blackboard eraser which is relatively free from shape distortion and extremely durable under repeated use.

It is a further object of my invention to provide a blackboard eraser which is highly efficient in removing chalk dust from blackboards and is easily cleaned either by washing or striking two such erasers together.

It is a still further objective of my invention to provide a blackboard eraser constructed of a readily compressible resilient pad element and having a rigid gripping element and a rigid stabilizing core for said pad element.

These and other highly important objects will become apparent to those skilled in the art when taken into consideration with the following specifications, attached drawings and appended claim.

Referring to the drawings wherein like characters indicate like parts throughout the several views:

FIG. 1 is a view in exploded perspective.

FIG. 2 is a view in perspective of my novel device in an assembled condition.

FIG. 3 is an enlarged view in longitudinal sections as seen from the line 3—3 of FIG. 2.

FIG. 4 is an enlarged view in transverse section as seen from the line 4—4 of FIG. 2.

Referring with greater detail to the drawings, there is shown an eraser indicated in its entirety by the numeral **10** and of the type used for removing chalk dust from the surface of a blackboard indicated by the reference character A. Eraser **10**, as shown, is comprised of an elongated, generally rectangular, rigid gripping element **11**. Gripping element **11** may be formed, by extruding or the like, from a suitable plastic material and includes the relatively flat plate like portion **12** having depending flanges **13** and **14** on opposite side edges thereof.

A readily compressible resilient pad element **15** is formed, from a flexible polyurethane plastic, in the shape of a rectangular prism. Pad element **15** includes the opposite side surfaces **16–17**, opposite end surfaces **18**, **19** and top and bottom surfaces **20**, **21** respectively. It will be noted that the peripheral shape of the upper surface **20** conforms generally to the outline of the gripping element **11** to permit reception of the pad element **15** between the depending flanges **13**, **14** thereof for a purpose which will become apparent hereinafter.

Formed in the pad element **15** is a recess **22**, the longitudinal axis of which extends along the greater portion of the length thereof. Recess **22** opens upwardly through the surface **20** of pad **15** in spaced relation to the opposite side edges or surfaces **16**, **17** thereof and is of a depth at least as great as one half the depth of the pad **15**.

A rigid stabilizing core **23** is snugly received within the recess **22** and is of a dimension to extend between the undersurface **24** of gripping handle **11** and the bottom **25** of recess **22** when the upper surface **20** of the pad **11** is received between the flanges **13**, **14** and with the surface **20** in engagement with the undersurface **24** of plate like

portion **12**. A suitable bonding agent is utilized between the surfaces **20**, **26** of the pad **15** and core piece **23** respectively and the undersurface **24** of gripping element **11** to securely bond the elements **15**, **23** to the gripping handle **11**. It will be noted that the stabilizing core **23** may be formed from any suitable plastic, but in the interest of providing a light weight, inexpensive eraser is preferably formed from a closed cell, rigid polyurethane plastic. Also, to improve the erasing qualities of the eraser **10**, the work engaging surface **21** of pad **15** is roughened by some such mechanical means such as a steel brush. Such roughening also enhances the ability of the work engaging surface **21** to pick up chalk dust.

Referring particularly to FIG. 4 it will be seen that when the normal pressures of erasing are applied (as indicated by the dotted arrows) the tendency of the pad **15** to collapse is prevented due to the presence of the rigid stabilizing core **23**. Thus, engagement of the flanges **13**, **14** of gripping element **11** and/or the fingers of a user, not shown, with the surface A being erased is prevented. Finally there has been provided an eraser formed from materials which, for cleaning purposes, may be washed without fear of damage thereto.

My invention has been thoroughly tested and found to be completely satisfactory for the accomplishment of the above objects; and while I have disclosed a preferred embodiment thereof, same may well be capable of modification without departure from the scope and spirit of the appended claim.

What is claimed is:

An eraser for blackboards and the like comprising:

(a) an elongated generally rectangular relatively rigid gripping element,

(b) a readily compressible resilient pad element generally in the shape of a rectangular prism having an upper surface and a lower work surface, said upper surface conforming generally to the outline of said gripping element,

(c) said pad element having a central recess which extends along the greater portion of the length thereof, and which opens upwardly through said upper surface in spaced relation to the opposite side edges thereof,

(d) said recess having a depth of at least as great as one-half the depth of said pad element,

(e) a rigid stabilizing core snugly received within said recess and extending between the bottom of said recess and said gripping element,

(f) means adhering said pad element and core to said gripping element, said gripping element being in the nature of a relatively flat plate having depending flanges on its opposite side edges, said flanges having a depth less than that of said core element and recess, said pad element being formed from flexible polyurethane and said core piece being formed from rigid polyurethane, the bottom surface of said flexible polyurethane pad element being mechanically roughened to enhance the working efficiency thereof.

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DANIEL BLUM, *Primary Examiner.*