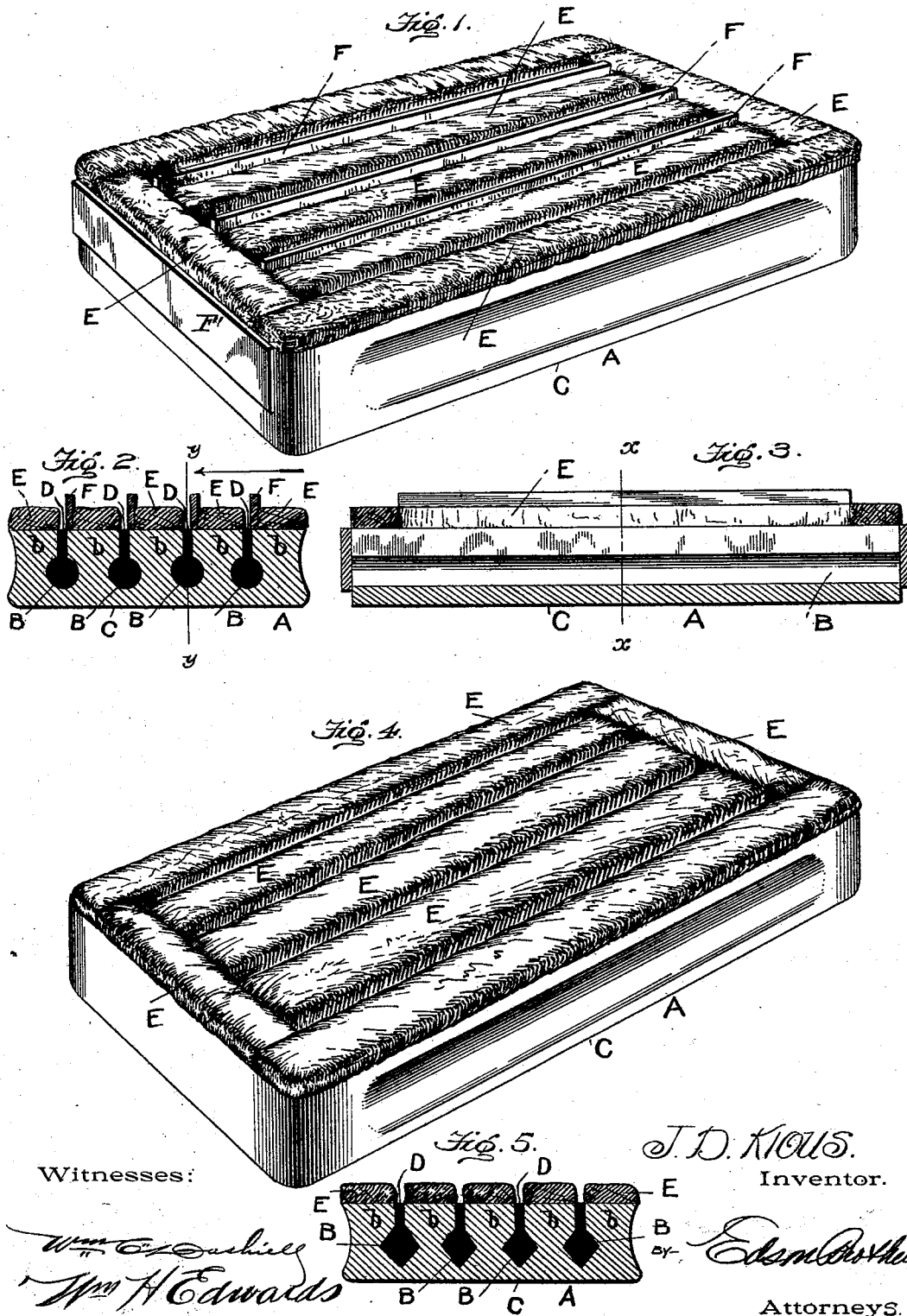


(No Model.)

J. D. KIOUS.
BLACKBOARD ERASER.

No. 522,469.

Patented July 3, 1894.



UNITED STATES PATENT OFFICE.

JASPER D. KIOUS, OF MOMENCE, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO LUDENTIA THROOP, OF SAME PLACE.

BLACKBOARD-ERASER.

SPECIFICATION forming part of Letters Patent No. 522,469, dated July 3, 1894.

Application filed March 3, 1894. Serial No. 502,205. (No model.)

To all whom it may concern:

Be it known that I, JASPER D. KIOUS, a citizen of the United States, residing at Momence, in the county of Kankakee and State of Illinois, have invented certain new and useful Improvements in Blackboard-Erasers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The objects of this improvement are to produce an eraser which will thoroughly efface all chalk-marks from the surface of a blackboard and also prevent the dust from flying or dispersing over the user thereof and into the room or apartment. To the accomplishment of these desirable ends, I construct my eraser with a rubbing surface composed of independent, closely-adjacent, pliable strips arranged to leave intermediate spaces between themselves for the passage of the chalk-dust into the body or back of the eraser; and this body is made with a solid back and with longitudinal chambers which are designed to receive the chalk-dust as it is effaced by the pliable strips, whereby the dust when it is cleaned off the blackboard surface will not adhere to the strips but passes between them into the longitudinal chambers and the eraser can be easily freed from the accumulations of dust in its chambers by knocking one end of the eraser against a wall, desk, or other surface.

My improvement further consists in the construction and organization of devices forming an improved blackboard eraser which will be hereinafter more fully described and pointed out in the claims.

To enable others to more readily understand my invention, I have illustrated the same in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of my eraser. Fig. 2 is a transverse sectional view on the line $x x$ of Fig. 3, and Fig. 3 is a longitudinal sectional view on the line $y y$ of Fig. 2. Fig. 4 is a perspective view of another embodiment of my eraser; and Fig. 5 a transverse sectional view thereof.

Like letters of reference denote like parts in all the figures of the drawings.

The body A of my improved blackboard eraser is preferably made or cut from a single piece of wood of appropriate size and shape, but the particular shape, size and substance are not material, although I prefer wood on account of its cheapness and the facility of manufacturing the article. Through the body, A, are formed or produced a series of parallel chambers, B, which extend longitudinally through the body and open through the ends thereof for the purpose of readily knocking out and removing the chalk-dust, although this is not essential; and these chambers are divided or separated from each other by the intervening walls or partitions, b .

The back, C, of the body is in one solid unbroken or continuous piece, to prevent the chalk-dust in the chambers B, from escaping over the hands and person of the operator; but the other surface of the body to which are applied the pliable strips, presently described, is broken by the channels D, which are formed by and between the walls or partitions, b , and through or by which channels the chalk-dust is conducted from the cleaning surface of the eraser to the chambers, B. These chambers are of greater diameter or width than the channels, D, and the chambers may be of any desired form in cross section, either round as shown by Fig. 2 of the drawings, or triangular as shown by Fig. 5, or any other desired form which experience may dictate or the demands of the users and trade may require.

E designates the series of parallel pliable strips which are preferably made of a suitable kind of felt, and F are other pliable strips of leather or rubber fabric. The felt strips, E, are affixed or secured, by cementing or other suitable manner, to the outer edges of the walls or partitions, b , and between the channels, D; and said pliable strips are of such width or thickness as to form a proper rubbing surface to the eraser and also afford each strip a certain independent play or action to enable it to properly perform its function of cleaning the surface of the blackboard and to provide for the passage of the chalk-dust between the strips of felt, into the adjacent channel, D, and to the chamber, B, in communication with the channel, as will be readily understood.

The pliable strips, F, of leather or rubber fabric, are of such width or so secured to the body A as to have their free edges project slightly beyond the outer free edges of the felt strips, and I have found that this construction operates to clean and efface the chalk-marks more thoroughly from the blackboard. However, I do not strictly limit myself to the use of these strips, F, and in Figs. 4 and 5 I have shown an eraser in which said strips, F, are omitted altogether. In the eraser shown by Figs. 1, 2 and 3, of the drawings, which is the preferred embodiment of my invention, these strips F alternate with the felt strips E, and a continuous strip, F', is provided around the sides and ends of the body A.

My improved eraser is used in the same manner as other blackboard erasers are used by those familiar with these devices, but unlike such prior devices which permit the rubbing surface to absorb the chalk-dust and hence in a short time becomes so filled or charged therewith as to disperse the dust over the person and room, besides rendering it difficult to clean off the accumulated dust, my improvement wholly obviates the dispersion of the dust over the room and person because the dust as it is cleaned off the blackboard does not become absorbed by the pliable strips E, F, but passes between them, into the channels, D, and thence to the chambers B. As the operator grasps the solid sides of the body A, the hands are not soiled by the chalk-dust, and the eraser can be easily freed or cleaned from the dust by striking one end thereof against a wall so that the dust in the chambers B will pass out at the ends thereof.

In the practical construction of my improved eraser, I prefer to close the ends of the dust-receiving chambers in the body in order to retain the dust within the chambers and prevent school-children from blowing it over one another. The ends of the chambers may

be closed in any desired way, as for instance by strips or heads, fastened or secured to the body by any preferred means, as will be readily understood.

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

1. An eraser comprising a body having the longitudinal chalk-receiving chamber, and a rubbing surface composed of felt and leather or rubber strips arranged parallel to each other, and said leather or rubber strips projecting slightly beyond the edges of the felt strips, substantially as and for the purposes described.

2. In an eraser, the body A having the solid back, the channels D, and the longitudinal dust chambers B of increased size as compared to the width of the channels, combined with the spaced, pliable, rubbing strips secured at their inner edges to the body between the channels therein, as and for the purposes described.

3. In an eraser, substantially such as herein shown and described, a body A provided with the series of internal longitudinal chambers B and a like series of channels D which extend from the chambers B and open through one face of the body, the width of the chambers being greater than that of the channels, combined with the series of parallel spaced rubbing-strips E secured at their inner edges to the body between the channels D, whereby spaces are provided between the series of rubbing strips for the chalk dust to pass into the channels D and thence to the enlarged dust chambers B, as set forth.

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

JASPER D. KIOUS.

Witnesses:

FRANK C. BROWN,
WILLIAM C. CALKINS.