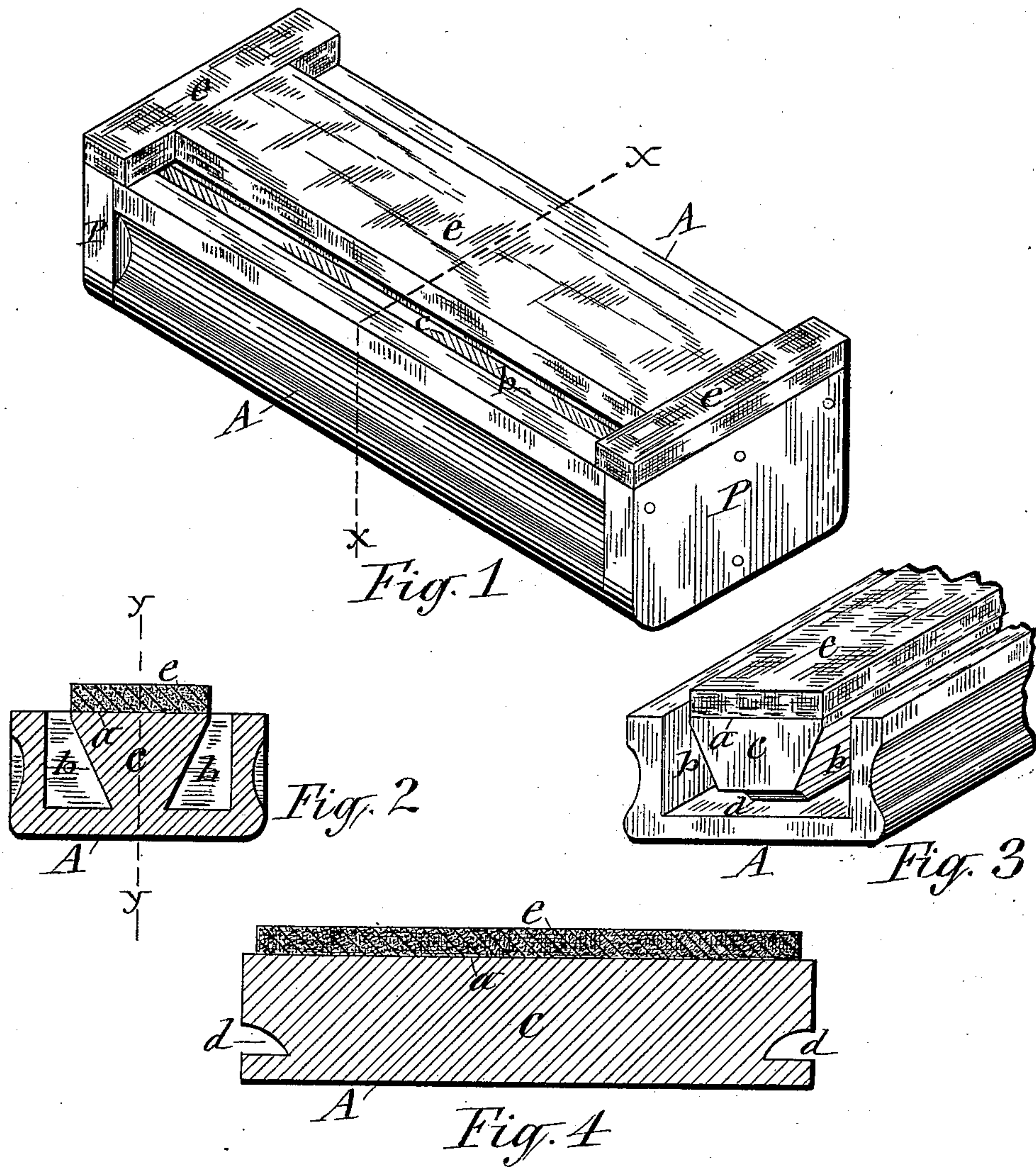


(No Model.)

W. F. JONES.
BLACKBOARD ERASER.

No. 405,096.

Patented June 11, 1889.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WALTER F. JONES, OF PARISH, ASSIGNOR OF ONE-HALF TO CHARLES W. BARDEEN, OF SYRACUSE, NEW YORK.

BLACKBOARD-ERASER.

SPECIFICATION forming part of Letters Patent No. 405,096, dated June 11, 1889.

Application filed March 30, 1889. Serial No. 305,385. (No model.)

To all whom it may concern:

Be it known that I, WALTER F. JONES, of Parish, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Blackboard-Erasers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My present invention relates more particularly to the blackboard-eraser for which I have filed an application for Letters Patent on the 20th day of June, 1888, Serial No. 277,677.

The object of this invention is to reduce the cost of manufacture of the blackboard-eraser, and at the same time render the same more durable; and to that end my invention consists in the improved construction of the frame of the blackboard-eraser, as herein-
after fully described, and specifically set forth in the claims.

In the annexed drawings, Figure 1 is a perspective view of a blackboard-eraser embodying my improvement. Fig. 2 is a transverse section on line *xx*, Fig. 1. Fig. 3 is a detached perspective view of an end portion of the frame minus its end plates, but with the rubber attached to the central rib; and Fig. 4 is a longitudinal section on line *yy*, Fig. 2, minus the aforesaid end plates.

Similar letters of reference indicate corresponding parts.

My improved blackboard-eraser frame is formed of an elongated block of wood *A*, composed of a single piece, in the rubber-carrying-face *a* of which I cut dust-receptacles, of the form of longitudinal grooves *b b*, extending throughout the length thereof, and preferably undercut the same at the sides of the intermediate rib *c*, so as to widen said grooves at their bases and render them more spacious for the purpose hereinafter explained. Through the base of said rib, at the ends thereof, I cut cross-channels *d d*, as shown in Figs. 3 and 4 of the drawings. To the ends of the block *A*, I attach plates *P P*, which close the longitudinal channels and have their edges flush with the face and sides of the block.

e e denote the rubber, consisting of strips of felt, glued or otherwise suitably secured to the face *a* of the block *A*, and end plates *P P*.

In the operation of said blackboard-eraser the dust becomes collected in the grooves *b b*, which it readily enters owing to the circulation of air admitted over the bare side edges of the block *A* into the grooves and through the cross-channels *d d*. The dust is readily removed from the grooves *b b*, and the eraser cleaned, when desired, by placing the eraser in an inverted position and rapping it while in such position.

The described frame can be manufactured in an expeditious and inexpensive manner by placing the block *A* on a suitable planing-machine, by which the two grooves *b b* can be cut simultaneously. A long rail may be thus grooved and then sawed transversely into a number of blocks *A A*. The end plates *P P*, which are plain thin boards, are readily tacked onto the block *A*.

A blackboard-eraser having its frame thus constructed is capable of resisting the rapping and careless handling and throwing about which such articles are usually subjected to in schools.

What I claim as new is—

1. As an improved article of manufacture, the blackboard-eraser frame consisting of a block of wood composed of a single piece having in its rubber-carrying face dust-collecting grooves extending throughout the length thereof, and plates attached to the ends of said block and closing the ends of the aforesaid grooves, as set forth and shown.

2. The improved blackboard-eraser frame consisting of a block of wood composed of a single piece having in its rubber-carrying face grooves extending throughout the length thereof, and cross-channels cut through the base of the intermediate rib at the ends thereof, and plates attached to the ends of said block and closing the ends of the longitudinal grooves, substantially as described and shown.

3. A blackboard-eraser frame consisting

of an elongated block of wood composed of a
single piece having in its rubber-carrying
face longitudinal grooves extending through-
out the length thereof and undercut at the
5 sides of the intermediate rib, and plates at-
tached to the ends of said block and closing
the ends of the longitudinal grooves, sub-
stantially as described and shown.

In testimony whereof I have hereunto signed
my name this 19th day of March, 1889.

WALTER F. JONES. [L. S.]

Witnesses:

J. S. LUDINGTON,
WNA OWEN.