

D. MOORE.
DUST TROUGH FOR BLACKBOARDS.
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1,060,352.

Patented Apr. 29, 1913.

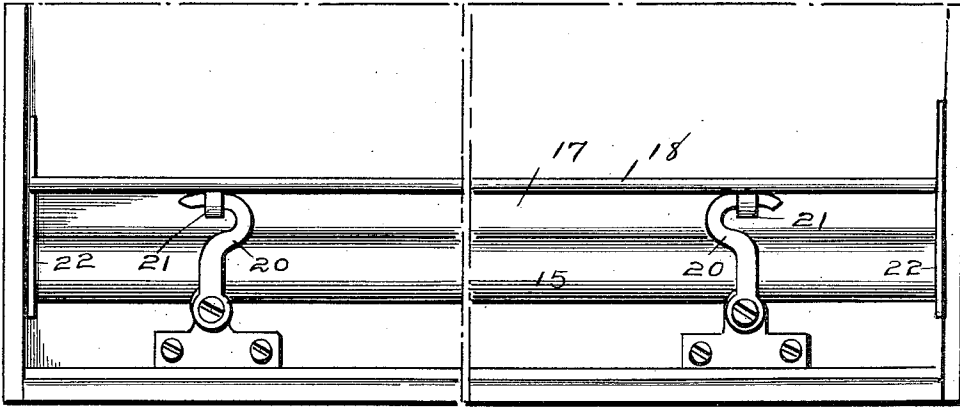


Fig. 3.

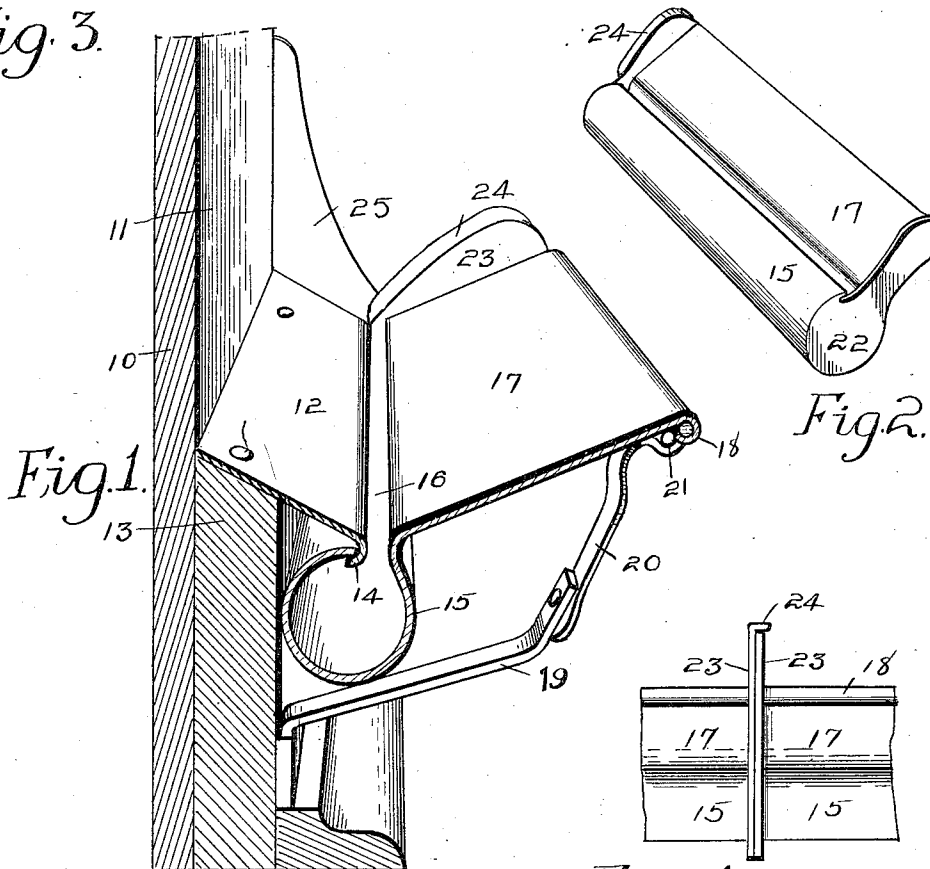


Fig. 1.

Fig. 2.

Fig. 4.

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UNITED STATES PATENT OFFICE.

DAVID MOORE, OF PERRY, IOWA.

DUST-TROUGH FOR BLACKBOARDS.

1,060,352.

Specification of Letters Patent.

Patented Apr. 29, 1913.

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To all whom it may concern:

Be it known that I, DAVID MOORE, a citizen of the United States, residing at Perry, in the county of Dallas and State of Iowa, have invented a certain new and useful Dust-Trough for Blackboards, of which the following is a specification.

The object of my invention is to provide a dust trough for blackboard of simple, durable and inexpensive construction having a trough which may be readily and easily attached to or detached from the blackboard.

A further object is to provide such a trough into which crayon dust and the like is admitted through a narrow slot so that said dust, when in the trough, is not likely to be blown about the room by drafts of air.

A further object is to provide such a trough for blackboards which may be readily detached and is so constructed that it may be quickly and easily emptied and cleaned.

A further object is to provide such a trough which serves as a dust receptacle and also as a convenient rack for crayons and erasers.

My invention consists in certain details, in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which:

Figure 1 shows a sectional perspective view of a blackboard and a dust-trough for blackboards, embodying my invention, installed thereon. Fig. 2 shows a perspective view of the detachable portion of a dust-trough. Fig. 3 shows a front elevation of my improved dust-trough for blackboards, and Fig. 4 shows a detail view showing the manner in which two sections of my improved dust-trough are fitted together.

In the accompanying drawings I have used the reference numeral 10 to indicate generally a wall on one surface of which is formed a blackboard 11.

My improved dust-trough is preferably built in sections and I will now describe one section thereof. I provide a metal sheet or plate 12 which is designed to be secured to the wall just below the blackboard and to be inclined downwardly therefrom as shown in Fig. 1. The plate or sheet 12 may be supported by a block 13 if desired. At its lower end the plate or sheet 12 is crimped or

curved downwardly at 14. The detachable portion of my improved dust-trough comprises a cylinder 15 preferably made of metal and having on one side a longitudinal slot 16. The portion 14 is designed to be received within the slot 16 and to rest beneath the edge of the cylinder as shown in Fig. 1. The other edge of the cylinder is provided with an upwardly and outwardly extending flat portion 17, the outer end of which is curved at 18, forming a small cylinder. Beneath the cylinder 15, I secure to the wall an outwardly extending bracket 19. Pivoted to the outer end of the bracket 19 is a hook 20, the free end of which is designed to be received in a loop 21 on the lower outer surface of the portion 17. As many of the brackets 19 and hooks 20 may be provided as desired. I preferably provide at each end of each cylinder, a vertical end member 22, and provide at the end of each portion 17 an upwardly extending flange 23. The flange 23 at one end of each section is provided at its upper edge with a laterally extending flange 24 designed to rest upon the upper edge of the flange 23 of an adjacent section. The wall 10 may, if desired, be provided with downwardly extending flat plates or boards 25 which engage the ends of the member 12. In the practical installation and use of my improved dust-troughs for blackboards, the member 12 is secured to the wall. As many of the members 12 may be installed in line with each other as desired. The detachable portion of the dust-trough is then placed adjacent to the portion 12 with the portion 17 in substantially upright position and with the slot 16 adjacent to the portion 14. The detachable portion is then moved inwardly toward the wall, the portion 14 being thereby inserted into the cylinder 15. The cylinder 15 is then rotated and the portion 17 is moved outwardly, causing the portion 14 to be received within the cylinder 15 and permitting one edge of the cylinder 15 adjacent to the slot 16 to rest upon the inwardly extending part of the portion 14, as shown in Fig. 1. The hooks 20 are then placed in engagement with the loops 21 and the detachable portion of the dust-trough is installed in position. If several sections are used, they are arranged so that the flange 24 of one section rests upon the flange 23 of the next adjacent section. Dust from the erasers and crayon drops through the slot 16 into the cylinder

15. When it is desired to remove the dust from my improved trough, the hooks 20 are disengaged from the loops 21, the portion 17 is moved upwardly and inwardly toward the portion 12 and the detachable portion of the trough may be slipped off the portion 12. The detachable portion may then be tipped to cause the dust in the cylinder 15 to drop to one end thereof and the dust may then be emptied through the slot 16. It will be noted that the portions 12 and 15 form a tray for the reception of erasers and crayon. The slot 16 is so narrow that crayon will not drop through it.

15 The advantages of my improved dust-trough for blackboards are obvious from the foregoing description. Among them is the fact that a very large part of the fine dust from crayons and erasers passes through the slot 16 into the cylinder 15, thereby removing it from the parts of the room and to a large extent keeping the dust out of the air in the school room and consequently protecting the health of the pupils.

25 My improved dust-trough is of simple, durable and very inexpensive construction, it may be applied to any ordinary blackboard and installed in any school room at a small expense. It is easily removed or repaired.

30 The detachable portion may be readily and quickly removed from the portion 12 and the dust in the cylinder 15 emptied into a bucket or the like. The trough may be made in sections so that it will fit practically any size of blackboard.

I claim as my invention:

1. In a device of the class described, a plate designed to be secured below a blackboard and inclined downwardly and outwardly therefrom and provided with a downwardly and inwardly curved portion at its outer edge, a cylinder provided with a longitudinal slot, one edge of which is designed to rest upon the inwardly curved portion of said plate and the other edge of which is provided with an outwardly and upwardly extending plate, and means for firmly securing said cylinder in position.

2. In a device of the class described, a plate designed to be secured below a blackboard and inclined downwardly and out-

wardly therefrom and provided with a downwardly and inwardly curved portion at its outer edge, a cylinder provided with a longitudinal slot, one edge of which is designed to rest upon the inwardly curved portion of said plate and the other edge of which is provided with an outwardly and upwardly extending plate, brackets, hooks pivoted to said brackets and designed to detachably engage said upwardly and outwardly extending portion, for securely holding the same in position.

3. In a device of the class described, a plate designed to be secured below a blackboard and inclined downwardly and outwardly therefrom and provided with a downwardly and inwardly curved portion at its outer edge, a cylinder provided with a longitudinal slot, one edge of which is designed to rest upon the inwardly curved portion of said plate and the other edge of which is provided with an outwardly and upwardly extending plate, and means for firmly securing said cylinder in position, said cylinder being provided with end members having slots to receive the inwardly extending portion of said plate.

4. In a device of the class described, a plate designed to be secured below a blackboard and inclined downwardly and outwardly therefrom and provided with a downwardly and inwardly curved portion at its outer edge, a cylinder provided with a longitudinal slot, one edge of which is designed to rest upon the inwardly curved portion of said plate and the other edge of which is provided with an outwardly and upwardly extending plate, means for firmly securing said cylinder in position, vertical upwardly extending flanges at each end of said upwardly and outwardly extending portion, a laterally extending flange formed on the upper edge of one of said vertical flanges.

In testimony whereof I affix my signature in presence of two witnesses this 15th day of July 1911.

DAVID MOORE.

Witnesses:

G. R. MELICK,
FRANK WILLIAMS.