

T. H. COSTELLO.
 BLACKBOARD.
 APPLICATION FILED JUNE 4, 1909.

1,004,375.

Patented Sept. 26, 1911.

Fig. 1.

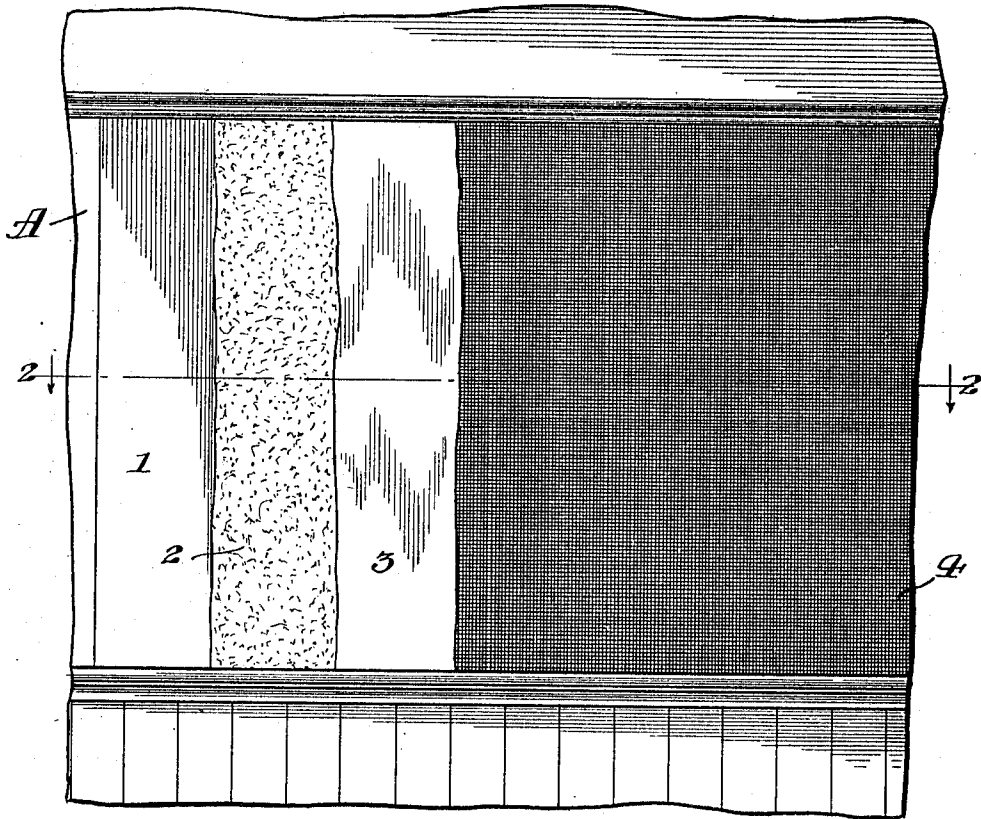
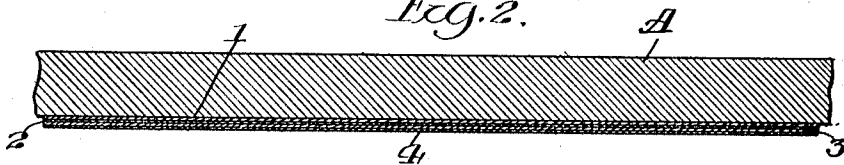


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS H. COSTELLO, OF CHICAGO, ILLINOIS.

BLACKBOARD.

1,004,375.

Specification of Letters Patent. Patented Sept. 26, 1911.

Application filed June 4, 1909. Serial No. 500,141.

To all whom it may concern:

Be it known that I, THOMAS H. COSTELLO, a citizen of the United States, residing at the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Blackboards, of which the following is a specification.

My invention relates to blackboards which have a metallic foundation or body. Such boards have many advantages in that they stand hard wear, do not crack or break, do not absorb moisture from the air, and the metallic body protects the writing face against moisture in the room walls on which they may be installed. They are conveniently packed for shipment by placing them in rolls, and are readily applied to the walls on which they are to be used. By means of this invention I am able to completely deaden or muffle the noise caused by the impact of a crayon on an otherwise unprotected metallic board, and I am able to obtain that soft, smooth and velvety surface which is a quality greatly sought for in a blackboard. This I can do at small expense, and am able to provide a practical, cheap and satisfactory device.

In the drawings: Figure 1 shows a front view of a blackboard, the several layers being so removed as to illustrate their relative position; Fig. 2 is a section of the same on the line 2—2 of Fig. 1.

Further describing the same, A represents a room wall to which my improved blackboard is applied.

1 is a sheet of suitable metal forming the foundation of such board. This is preferably of what is known in the market as "Patent leveled steel." It is a variety of sheet steel from which the unevenness and inequalities of surface have been removed by stretching or other mechanical means. Upon this metallic foundation I secure a layer of resilient material 3. The latter is preferably fibrous in character, such as is known commercially as "vulcanized fiber," hard calendered Manila paper or special material of the character described later, in which the coloring material and abrasive as hereinafter described is incorporated with the fiber in the process of manufacture.

In any case the selected material may be secured to the metallic foundation by a suitable adhesive layer 2, such as asphaltum paint or varnish. The application should be made under pressure which may be done

by passing the layers with cement when in a soft condition between them through suitable rollers or by subjecting them to the action of a hydraulic press. In this manner all air bubbles and inequalities are removed and the layers are forced into intimate contact, leaving a smooth and level surface. If the resilient layer is not specially prepared a coating 4 should be placed thereon containing a pigment which may be black or any other desired color, and also an abrasive to form a proper frictional surface and present a "tooth" to the crayon. A suitable mixture for this purpose is suggested in a former patent issued to me January 23, 1906, No. 810,623, upon which my present invention is an improvement. As above stated I prefer to use a specially prepared material on the metallic foundation, which may be made by incorporating a pigment such as lamp black and an abrasive such as powdered pumice each to the extent of about 3% of the bulk of the paper pulp in the paper pulp in the process of manufacture which is then dried and calendered in the usual manner. By so doing the colored and abrasive surface of the board is self renewed as fast as it wears and no application of a new surface is required.

I claim:

1. A blackboard comprising a metallic foundation, and an independently formed layer of fibrous resilient material secured to the outer face of the foundation said layer being provided with a pigmented abrasive wearing face.

2. A blackboard comprising a flexible metallic foundation, and a layer of fibrous resilient material secured to the outer face of the foundation said layer being provided with a pigmented abrasive wearing face.

3. A blackboard comprising a flexible metallic foundation, a layer of paper or other fibrous resilient material cemented to the outer face of the foundation, and a pigmented wearing face on the surface of the said resilient layer.

4. A blackboard comprising a metallic foundation, and an independently formed resilient layer secured thereto, said layer having suitable coloring matter and abrasive material incorporated in the body thereof to provide a wearing face.

5. A wearing face for blackboards consisting of a sheet of fibrous resilient material having suitable coloring matter and abrasive

material incorporated in the body thereof to provide a wearing face.

6. In a blackboard, the combination with a resilient fibrous wearing face, of a metallic
5 back and an adhesive layer to secure the back to the face.

In witness whereof, I have hereunto set

my hand, this 2nd day of June A. D. 1909,
in the presence of two subscribing witnesses.

THOMAS H. COSTELLO.

Witnesses:

C. K. CHAMBERLAIN,

A. S. PHILLIPS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."