

(No Model.)

J. H. DE NEUT.
SCHOOL SLATE.

No. 487,178.

Patented Nov. 29, 1892.

Fig. 1.

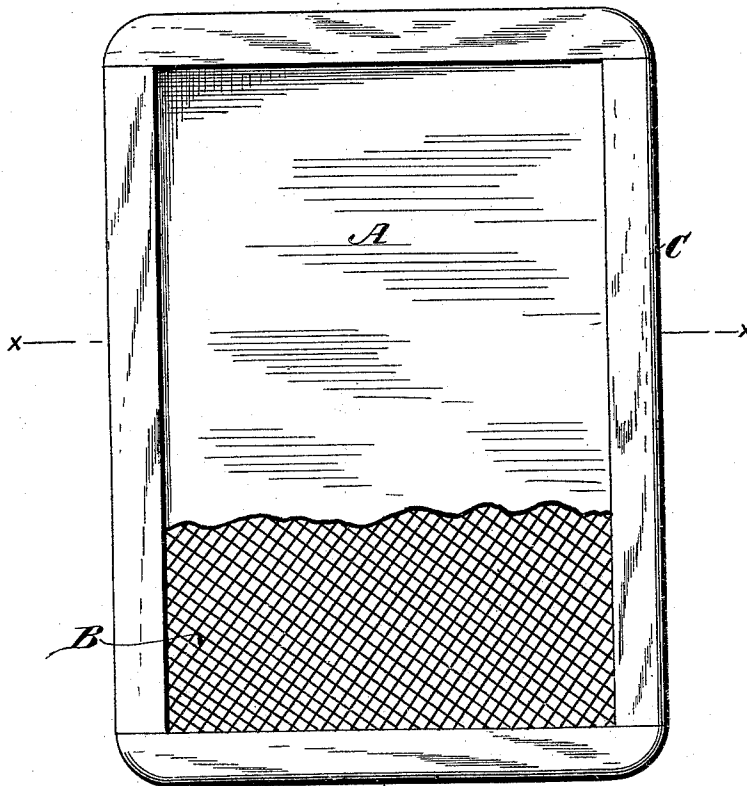
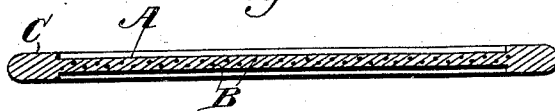


Fig. 2.



Witnesses.
Phil E. Smith.

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Inventor.
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By *Edward Tappan.*
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UNITED STATES PATENT OFFICE.

JOHN H. DE NEUT, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF
TO JOHN H. COLLETON, OF SAME PLACE.

SCHOOL-SLATE.

SPECIFICATION forming part of Letters Patent No. 487,178, dated November 29, 1892.

Application filed March 28, 1892. Serial No. 426,814. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. DE NEUT, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a certain new and useful School-Slate, of which the following is a specification.

This invention relates to a new and improved article adapted for school-slates, blackboards, and other analogous purposes which will embody the qualities of strength, lightness, cheapness, and durability; and it consists in the formation of the body of the same of wire-cloth covered with paper-pulp made from wood, straw, rags, or other suitable substance, the same hardened and smoothed and filled with a suitable gritty material, such as emery, so as to have a surface which can be used readily as a slate or blackboard in connection with an ordinary slate-pencil or crayon. The material with which the pulp is filled may be emery-dust, slate, or any other suitable gritty material which will give the body sufficient solidity and consistency to take from the pencil a sufficient quantity of material to make a mark as the pencil is carried over the slate.

My further object is to combine with the slate-body constructed as described a frame extending around a slate, the same being made of pulp and integral with the slate itself.

These objects I accomplish by means of the construction and ingredients described herein and illustrated in the annexed drawings, in which—

Figure 1 shows a plan view of a slate partially prepared in accordance with my invention, and Fig. 2 shows a sectional view on line *xx* of Fig. 1.

Similar letters refer to similar parts throughout the several views.

A represents the pulp coating forming the body and surface of the slate.

B shows the wire netting or cloth which is used to strengthen the slate-body.

In Fig. 1 I have shown a part of the wire-netting covered and completed and a part of it without the pulp covering. The wire-cloth may be of any suitable-sized wire and may be woven in any manner of sufficient strength to hold the pulp in place thereon. In place

of the wire-cloth wires may be used, extending only in one direction, with an occasional cross-wire to add strength and stability to the structure when completed.

C represents the frame of the slate, which, as shown in Fig. 1, is placed around the slate-body. This frame, however, I design to construct integral with the slate-body, as shown in Fig. 2, the outer portion of the pulp being pressed up and being of sufficient thickness to make a slate-frame.

The slate-frame may be ornamented in any suitable manner and may be provided, if desired, with a hollow or depression for holding the pencil. If it is desired to give the body of the slate greater strength, greater thickness can be added and the size of the wire increased; but I believe that the ordinary wire-cloth will be found strong enough for all practical purposes. The "grit" or capacity of the slate to act upon the pencil can be increased or decreased by a composition which is embodied with the pulp. The slate proper should be pressed, so as to be reasonably smooth, and preferably is smoothed after pressure.

By constructing a slate in the manner described I combine lightness with strength and durability. The wire-cloth gives it sufficient strength to bear considerable pressure and absolutely prevents the danger of breaking by dropping the slate or ordinary accidents, while the slate completed in this manner will be very light as compared with the ordinary slate.

In using my invention for a school-slate the plate will be smooth on both sides, so that each side may be used as a slate, and the color will be preferably black, or nearly so.

In using my invention as a blackboard or for analogous purposes ordinarily but one side will be finished, and the color may be of any shade desired.

It will be evident that by using white pulp and a light material—like gypsum, sulphate of lime, or chalk—the board may be made white, when it would be adapted for use in connection with a black crayon.

In case it was found desirable to use a wooden frame instead of having the frame integral with the slate, it is evident that an or-

dinary frame could be applied either of wood or metal.

It is my design to use my invention both for the purpose of an ordinary slate and also
5 for other purposes for which it is adapted.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture,
10 a slate or blackboard having a center of wire-cloth or wire supports and a body and surface composed of pulp filled with a gritty material, substantially as described.

2. As an improved article of manufacture, a slate or blackboard having a center of wire-cloth or wire supports, a body and surface composed of pulp filled with a gritty material, and a frame integral with said body and surface, substantially as described.

In witness whereof I have hereunto set my
hand and seal in the presence of two witnesses.

JOHN H. DE NEUT. [L. S.]

Witnesses:

JOHN H. CALLETON,
HARRY P. VAN WAGNER.