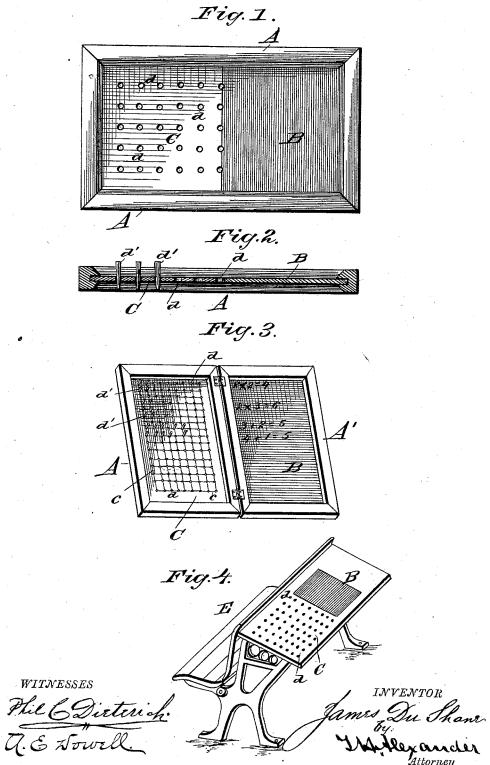
J. DU SHANE.

SCHOOL SLATE.

No. 347,696.

Patented Aug. 17, 1886.



UNITED STATES PATENT OFFICE.

JAMES DU SHANE, OF SOUTH BEND, INDIANA.

SCHOOL-SLATE.

SPECIFICATION forming part of Letters Patent No. 347,696, dated August 17, 1886.

Application filed December 22, 1885. Serial No. 186,447. (No model.)

To all whom it may concern:

Be it known that I, JAMES DU SHANE, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new 5 and useful Improvements in School Slates; and I do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked 10 thereon, which form part of this specification, in which-

Figure 1 is a plan view of my improved counting and recording slate. Fig. 2 is a longitudinal cross-section of the same. Fig. 3 is 15 a view of a double slate embodying my invention. Fig. 4 is a view of a desk having the

invention applied to its lid.

This invention relates to educational appliances, and has especial reference to slates 20 or desks used in primary schools; and it consists in the novel construction and arrangement of the parts, as will be fully understood from the following description, when taken in connection with the accompanying drawings.

A designates a slate-frame of ordinary construction. One half of the inside of the frame is filled by a slate, B, and the other half is occupied by a thin board, veneer, or strip of suitable material, C, hereinafter described.

The board C may be divided into similar figures or squares by lines or grooves c, which cross each other at equal distances. The board has perforations d, for the reception of pins d', made preferably at the intersections of the 35 lines c, or in like places in the figures formed by the lines. The lines c may be omitted, as they are only used as a guide for the eye to enable the scholar to more readily follow the rows of perforations which are made in the 40 board, as described. The board may be large enough to fill the entire frame A, and have the slates B secured on its side or sides at one end of the frame, by means of glue or other suitable fastening, or may have one portion slated

45 with liquid slate in the ordinary manner. Fig. 3 shows a double-hinged slate, one frame, A, of which is occupied by a perforated board, C, as described, and the other frame, A', contains a slate, B.

board, C, and slate B, such as described, inlaid in its top or cover, which forms a frame, answering to frame A for the same.

The invention is especially designed for use in primary schools in which the younger schol- 55 ars are provided with the slates or have the desks E, as described. It is used as follows:

The teacher gives the children an example in arithmetic-say in addition, for example. The several numbers to be added are called 60 out and the scholars insert in the perforations of the boards C, in the different rows, the several numbers named by the teacher. The scholars can then count the number of the separate pegs in the different rows and set down their 65 aggregate amount in pencil on slate B. To subtract a number from the added sum he would remove as many pegs from the board C as the number to be taken away, then by counting the remaining pegs in the board would 70 have the correct answer, which could be written upon the slate as before.

It is obvious that the invention may be used for various purposes other than those described—such as outlining drawings by means 75 of the pegs on the board, and then copying the outlines on the slate in pencil, &c., thus accustoming the child, by simple and practical means, to associate various things with signs representing them collectively or singly, and 80 also helping him to understand the arithmetical and geometrical proportions of things. The slate is also adapted for use as a game-

counter, as is evident.

Having described my invention, I claim- 85 1. An educational device consisting of two parts hinged together at their similar edges, one part being composed of suitable thin material—such as veneer—and provided with perforations situated at the points of intersection 90 of equidistant right lines crossing each other at right angles, and the other part composed of some material adapted to be written uponsuch as slate—the two parts being so hinged that when opened apart both can be used at 95 the same time, substantially as specified.

2. The herein described educational device, consisting of the equal-sized rectangular parts A A', hinged together at the side edges of their Fig. 4 shows a school-desk, E, having a frame, the part A being composed of suitable 100 thin material—such as veneer—and provided with the perforations d, situated at the intersection of the two sets of grooves c c, crossing each other at right angles and adapted to 5 guide the pins d into the perforations, and the part A being composed of some material adapted to be written upon—such as slate—all constructed and arranged substantially as and for the purposes specified.

own I affix my signature in presence of two witnesses.

Witnesses:

CHAS. W. WILEY, COMMENCE OF THE COMMENCE OF TH