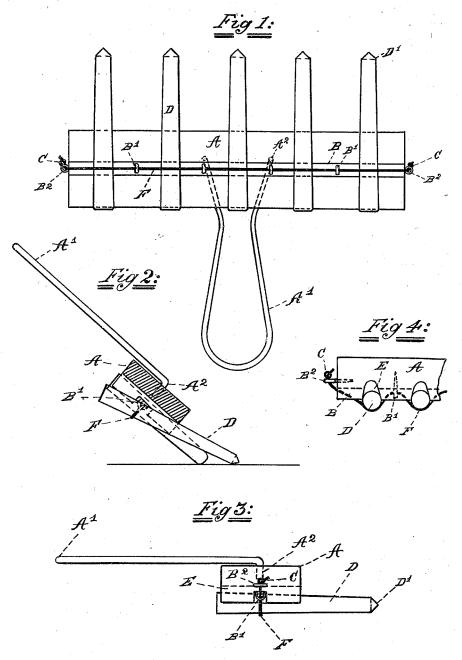
## B. N. BLACK. RAPID BLACKBOARD LINER.

(Application filed Sept. 14, 1899.)

(No Model.)



WITNESSES:

Edward & Degreen

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## UNITED STATES PATENT OFFICE.

BENJAMIN N. BLACK, OF PATERSON, NEW JERSEY.

## RAPID BLACKBOARD-LINER.

SPECIFICATION forming part of Letters Patent No. 647,070, dated April 10, 1900.

Application filed September 14, 1899. Serial No. 730,404. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN N. BLACK, a citizen of the United States, residing at Paterson, in the county of Passaic and State of 5 New Jersey, have invented certain new and useful Improvements in Blackboard-Liners, of which the following is a specification, reference being had therein to the accompanying drawings.

One object of my invention is to provide a rapid and reliable liner for blackboards which will make a number of parallel lines or concentric circles in various relative positions by means of marking-crayons or other mark-15 ing materials without regard to the differences in length of the crayons and to produce

a holder for the crayons in which they may be arranged and adjusted with ease and facility and in which they may be tilted without slipping when in use.

A further object of my invention is to provide a device that will be an aid to the teacher in blackboard illustration and that may be taken apart and put together quickly and 25 which when taken apart may be handily packed in a small parcel for shipping or mailing purposes.

A still further object of my invention is to produce a blackboard-liner simple in con-30 struction, practical, durable, and cheap.

The accompanying drawings illustrate my invention, similar letters of reference in the various figures indicating like parts.

Figure 1 is a plan view of the back of my 35 blackboard-liner, the crayons being held in position in the transverse grooves in the stock or body portion by the elastic band or cord which is passed alternately over the crayons and through the eyes which are screwed in 40 the bottom of the longitudinal groove in the stock or body. Fig. 2 is an end view, part sectional, showing long and short crayons adjusted and tilted as when in use. Fig. 3 is an end view, the crayons being of equal length: 45 and Fig. 4 is a part back view.

In the drawings, A is the stock or body portion; A', the removable spring-handle; A2, the bent-over ends of the handle, which are pressed toward each other and inserted in the 50 body, as shown in Figs. 1, 2, and 3; B, the longitudinal groove in which the eyes B' are secured, through which the elastic band passes, F being the band; D, the crayon; D', point of same, and E the transverse grooves for crayons.

The elastic band or cord may be secured in eyes B2 by knots C or in any other suitable manner.

It is obvious that crayons, pencils, or brushes may be used in my holder and even 60 pens, if desired. In each instance the elastic band will hold the article used in position and permit it to be tilted, and the stock or body will form a fulcrum.

The number of grooves E may vary, and 65 the crayons or other marking article may be placed in the grooves necessary to give the required distance between the lines or circles.

With the point D' as the center or pivot one or more concentric circles or parts there- 70

of may be drawn.

In teaching music, writing, bookkeeping, arithmetic, geometry, and other subjects this liner will be of great utility, as two or more lines may be drawn parallel in any direction 75 and circles and ares in various relative positions, as above stated. An advantage quite apparent with my invention is the fact that the handle may be removed and folded up with the stock or body, when it makes a small 80 neat package easily handled, shipped, or mailed. The tautness of the elastic band is regulated with ease and facility. The elastic band or cord permits the use of crayons of unequal length, as it yields gently to the 85 pressure necessary to cause the crayons to tilt and trace the lines or figures desired.

The crayon may be utilized to the same ex-

tent as if used by hand.

With this description of my invention, what co

I claim is-

1. In a blackboard-liner, the stock or body portion provided with transverse grooves adapted to hold crayons or other marking articles, and also provided with a longitudinal 95 groove intersecting said transverse grooves, in combination with means for holding said crayons or marking articles in said transverse grooves, substantially as set forth.

2. The body portion or stock, provided with 100 transverse grooves, a longitudinal groove intersecting the same, in combination with an elastic material adapted to hold two or more crayons, or other marking articles, in said

transverse grooves and to permit them to tilt, substantially as set forth.

3. The body portion or stock, provided with transverse grooves and a longitudinal groove intersecting the same, in combination with an elastic material, secured in said longitudinal groove, and adapted to hold two or more crayons, or other marking articles, in said transverse grooves and to permit them to tilt.

and a detachable spring-handle, substantially ic as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN N. BLACK.

Witnesses:

I. F. Boice,

JOHN F. KERR. transverse grooves and to permit them to tilt,

Witnesses:
I. F. BOICE,
JOHN F. KERR.