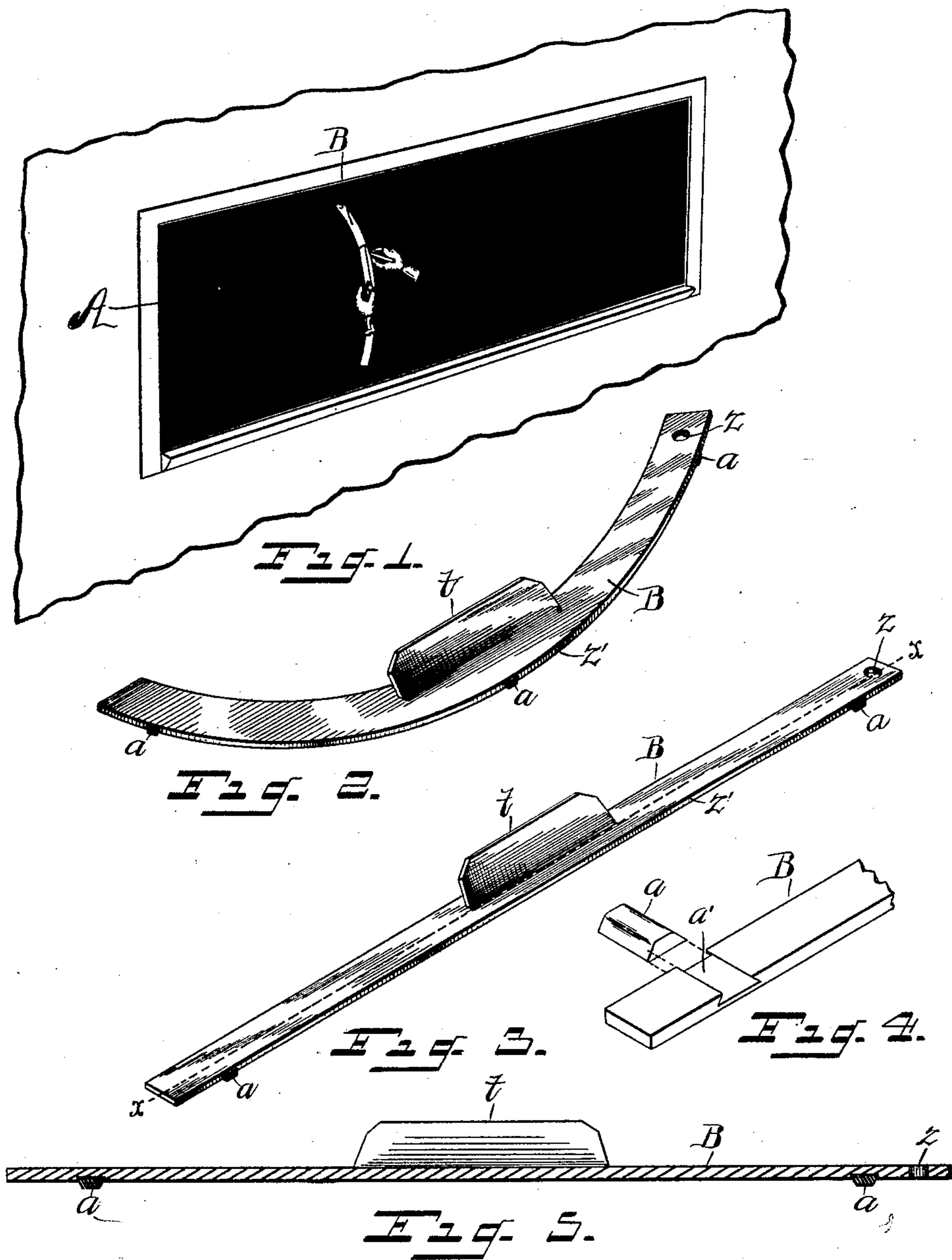


(No Model.)

A. E. FITZGERALD.
RULER.

No. 434,660.

Patented Aug. 19, 1890.



WITNESSES

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UNITED STATES PATENT OFFICE.

ADELBERT E. FITZGERALD, OF BELLEVUE, MICHIGAN.

RULER.

SPECIFICATION forming part of Letters Patent No. 434,660, dated August 19, 1890.

Application filed February 10, 1890. Serial No. 339,920. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT E. FITZGERALD, a citizen of the United States, residing at Bellevue, in the county of Eaton and State of Michigan, have invented certain new and useful Improvements in Rulers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in drawing-rulers especially adapted for blackboard use in schools; and it consists in providing such ruler near its longitudinal center with an extended cleat or handle and in its under face with a series of rubber cushions that extend beyond the back surface of the ruler.

The object of the invention is to produce a drawing-ruler that may be held firmly in one hand, that will not slip on the surface of the blackboard, and that is noiseless when in use. This object is attained by the device illustrated in the accompanying drawings, in which—

Figure 1 is a view showing the manner of using my improved ruler on a blackboard. Fig. 2 is a perspective view of the ruler in circular form. Fig. 3 is an isometrical view of a straight ruler. Fig. 4 is an enlarged detail, showing the manner of securing the rubber cushions in the back face of the ruler. Fig. 5 is a longitudinal section on dotted line *xx* of Fig. 3.

Referring to the letters of reference, A indicates an ordinary blackboard, and B the body of my improved drawing-ruler.

This improved ruler is constructed of any suitable material, light wood, however, being preferred, and may be made straight or circular in form to supply the various needs in its use.

The ruler is provided on its back face near its longitudinal center with the raised cleat or handle *t*, inclined slightly away from its front or scribing edge *z'*. Said cleat forms a handle, by which the ruler may be firmly held while in use, the position of said handle being such that the hand engaged in holding

the ruler does not interfere with scribing or ruling, as shown in Fig. 1. The handle *t* may be formed integral with the body of the ruler; but the preferred manner is to make it so as to be attached thereto.

The ruler is provided on its front face with the rubber cushions *a*. The dovetailed groove *a'* is formed so as to cross the front face of the ruler, as shown in Fig. 4, and the corresponding piece of rubber *a* secured therein. Said rubber extends beyond the front face of the ruler and affords a bearing-surface therefor, that prevents the ruler from slipping when placed against the blackboard and renders said ruler noiseless when in use. If desired, felt may be used instead of the rubber *a* with substantially the same result. There are two of these cushions *a* used on the straight rulers—one at each end thereof—but on the circular ruler three of the cushions are required, the additional one being located at the center of the ruler, as shown in Fig. 2. This prevents said ruler from rocking when placed against the surface of the blackboard. The cushions hold the body of the ruler slightly away from the blackboard, which allows a free discharge for the powdered chalk removed from the crayon.

The circular ruler is designed to be used in striking a circle or where it is desired to place the work in brackets. The straight ruler is used as in ordinary ruling. The hole *z* at the end affords means by which the ruler may be hung up when not in use.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the body of the ruler having the handle on its back face, which handle is inclined from the scribing-edge of the ruler and having in its front face the dovetailed grooves *a'* crossing the ruler transversely, and the rubber cushions secured in said grooves, as and for the purposes specified.

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

ADELBERT E. FITZGERALD.

Witnesses:

J. R. HALL,

FRED W. FITZGERALD.