

No. 692,354.

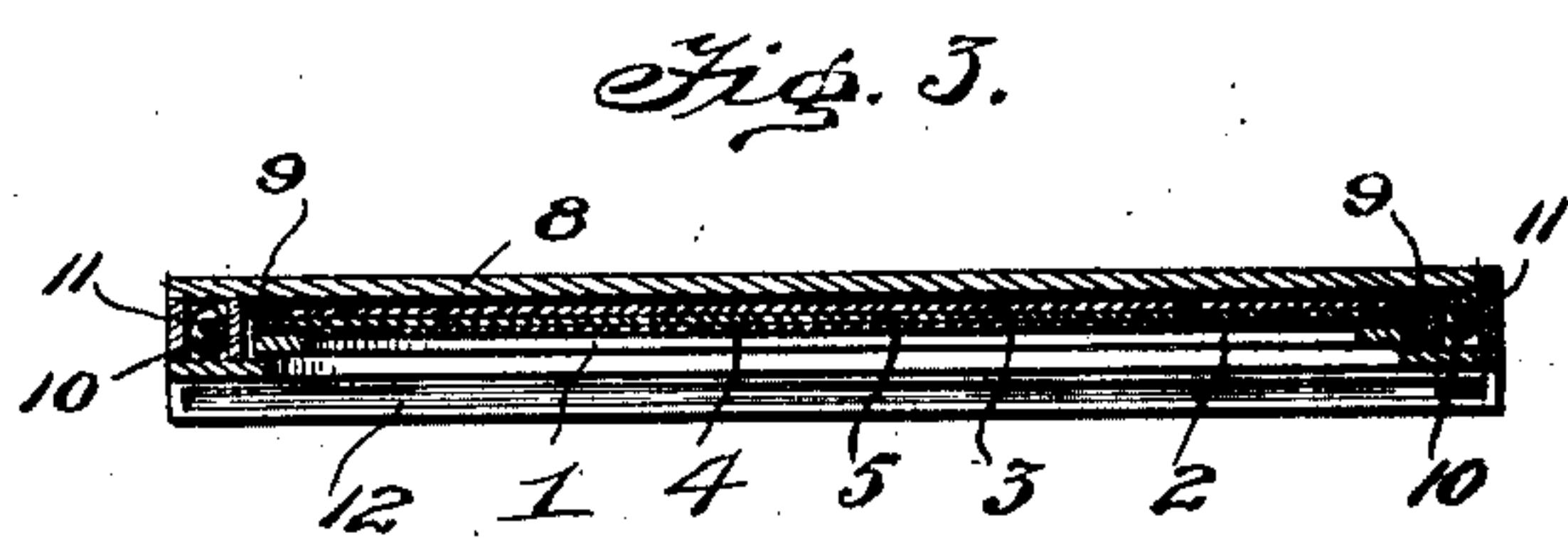
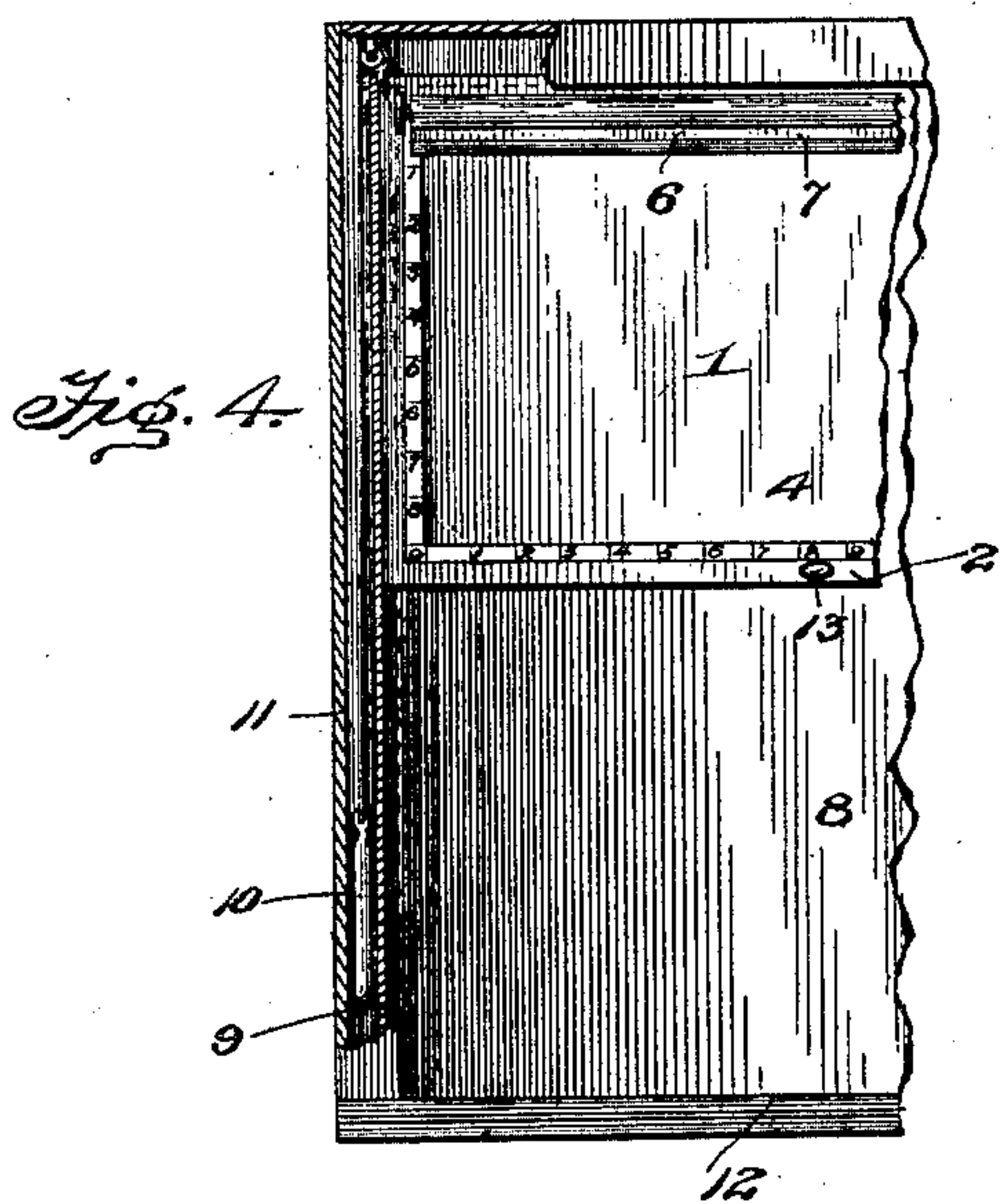
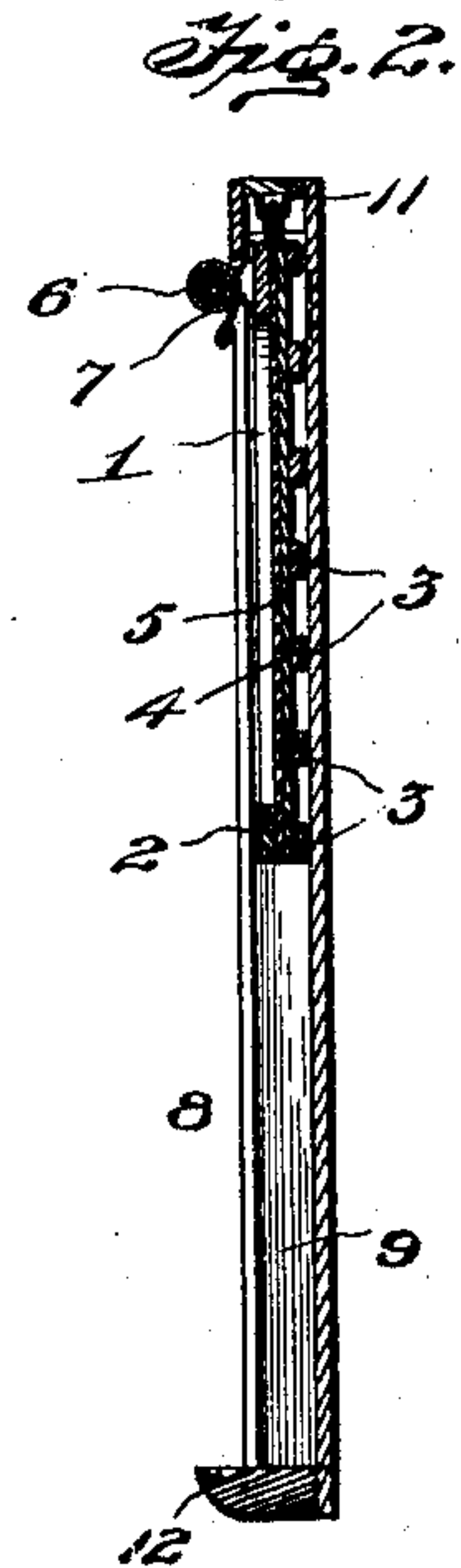
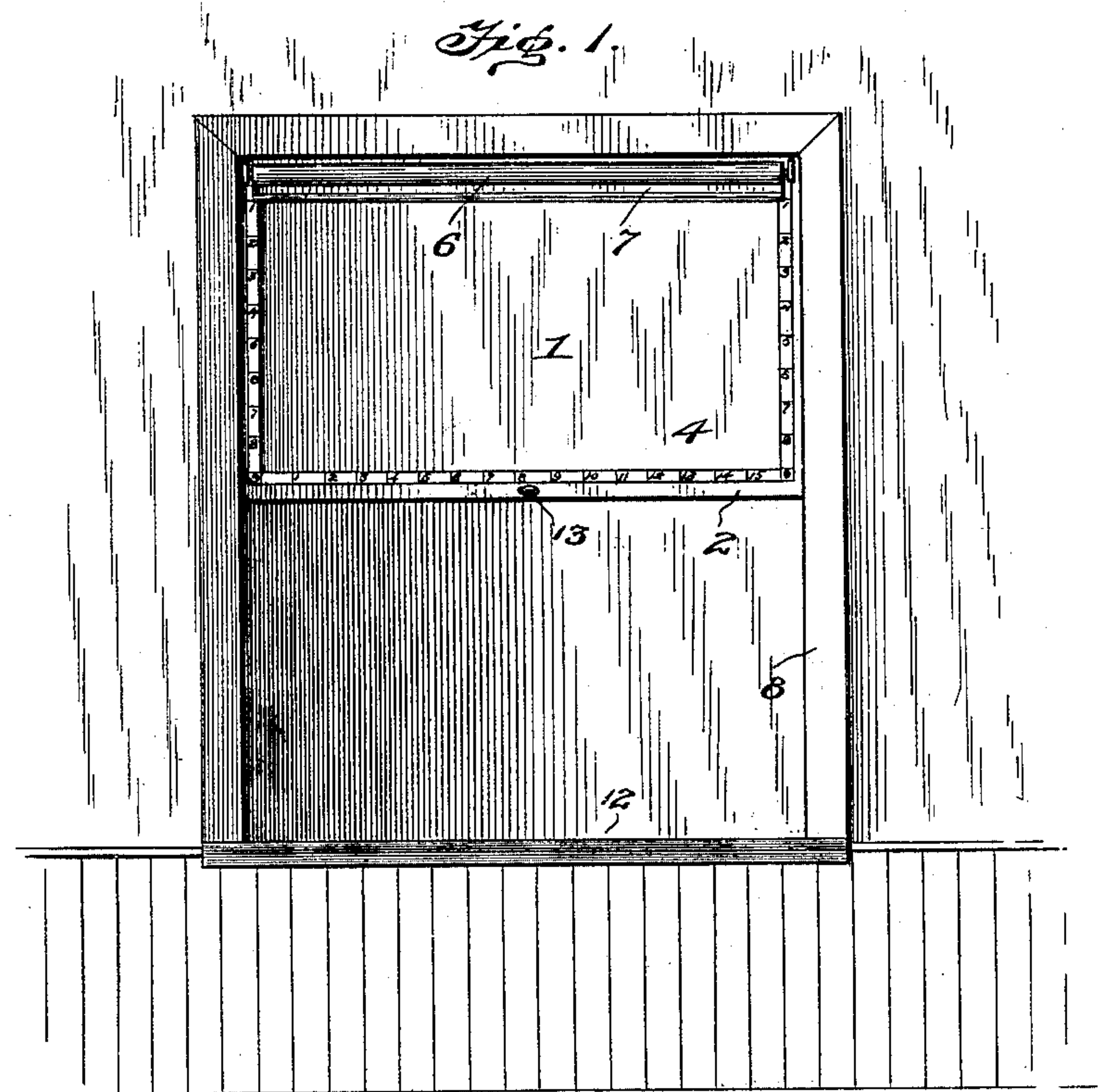
Patented Feb. 4, 1902.

J. K. RITCHEY.  
BLACKBOARD.

(Application filed Dec. 13, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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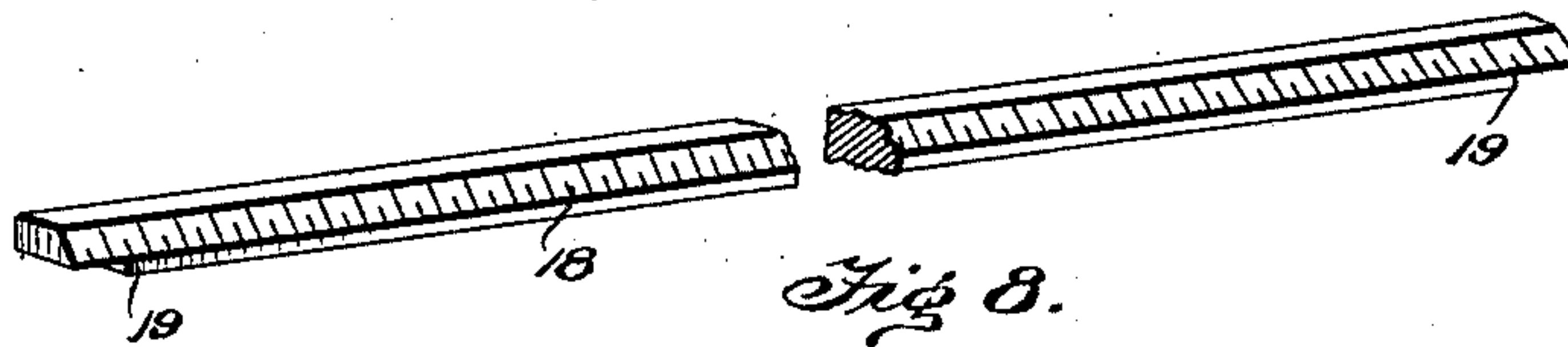
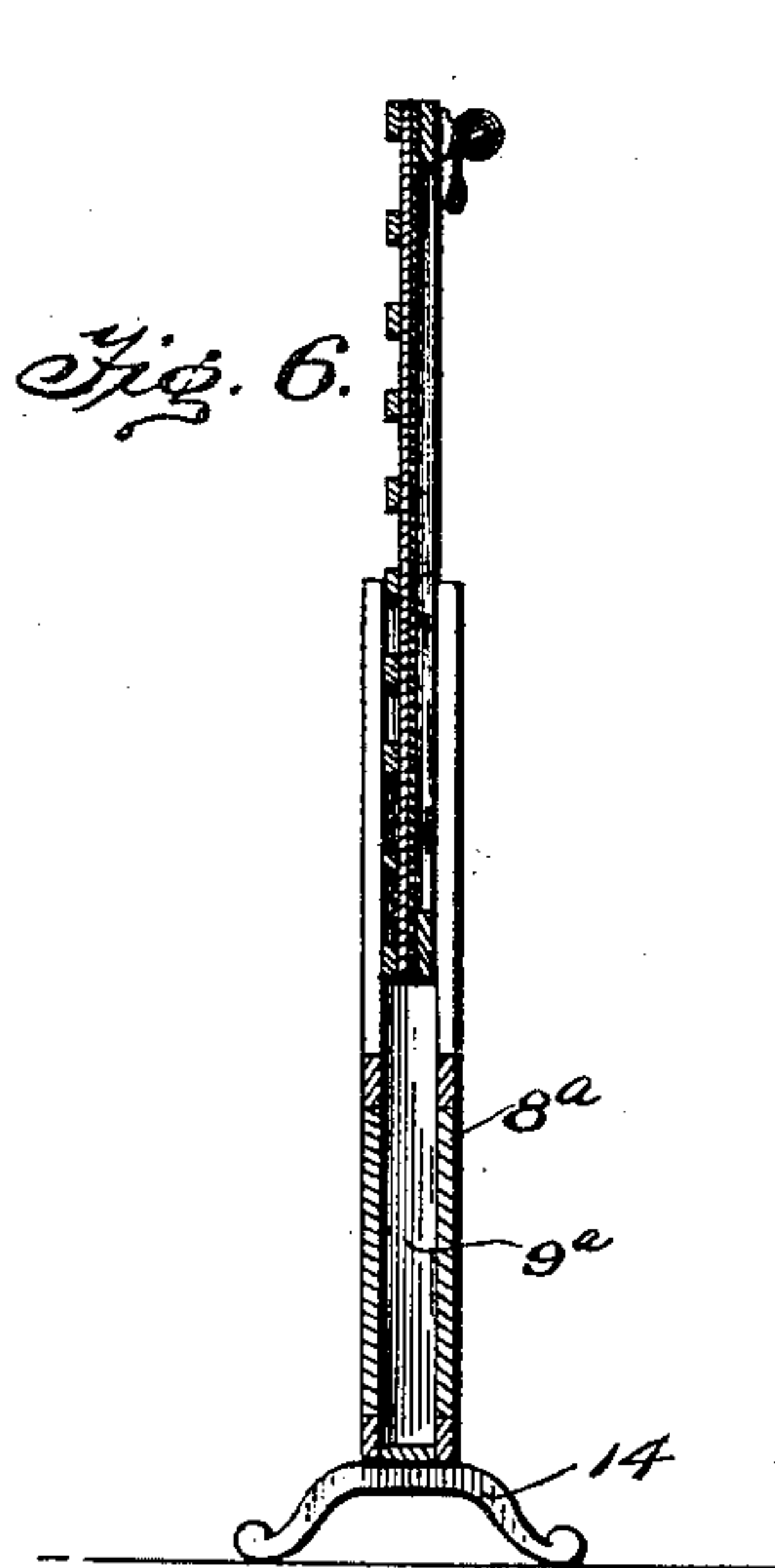
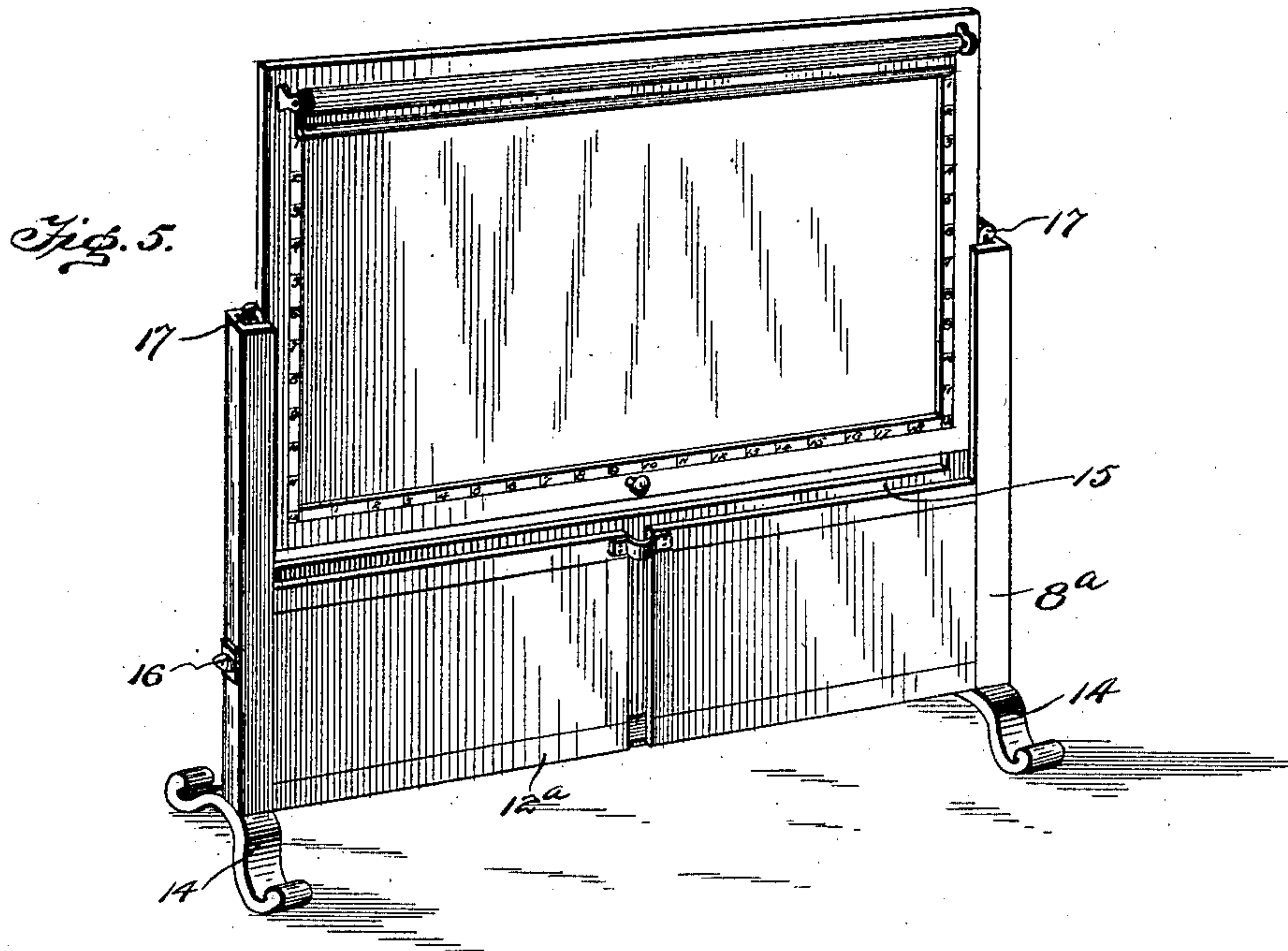
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2 Sheets—Sheet 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOSEPH K. RITCHEY, OF ROARING SPRING, PENNSYLVANIA.

## BLACKBOARD.

SPECIFICATION forming part of Letters Patent No. 692,354, dated February 4, 1902.

Application filed December 13, 1900. Serial No. 39,750. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH K. RITCHEY, a citizen of the United States, residing at Roaring Spring, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Blackboards; 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.

My invention relates to improvements in blackboards; and it consists in certain improved features of construction and combination of parts which will be hereinafter fully described, and particularly pointed out in the appended claim.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of a blackboard embodying my invention. Fig. 2 is a vertical section thereof. Fig. 3 is a horizontal section. Fig. 4 is a detail view of the blackboard-frame and a portion of the casing, showing the latter broken away to expose the counterweight. Figs. 5, 6, and 7 are respectively a perspective view, a vertical section, and a horizontal section of a modified form of blackboard. Fig. 8 is a perspective view of a ruler designed to be used in connection with my improved blackboard.

Referring now more particularly to the drawings, the numeral 1 represents my improved blackboard, which comprises a rectangular frame 2, suitably braced at the rear to prevent warping by strips 3 and inclosing a writing-surface 4, composed of slated cloth or paper having a backing 5 of cardboard, leatherine, or other suitable material, the slated cloth or paper and backing being secured to the frame in any approved manner. A spring-actuated shade-roller 6, of the ordinary or any preferred construction, is mounted at the top of the blackboard-frame on the front side thereof, and has attached thereto a shade or chart-blind 7, which may be drawn down over upon the writing-surface 4 to conceal the same from view. Thus a teacher or lecturer using the board may place thereon the lessons or work for the ensuing day and keep the same concealed until ready to present it. This is of great advantage in school work, as it permits the teacher to place

the work on the board in the evening or at odd hours for presentation at any time during the following day and to keep the writing-surface out of sight until the time for disclosure of the work arrives.

The outer or front surfaces of the side and bottom rails of the frame of the blackboard 2 are ruled or provided with graduations to facilitate and render easier the operation of making accurate diagrams or drawings upon the board. These ruled lines or graduations are also of advantage in the drawing of straight horizontal or vertical lines in teaching music and penmanship.

The numeral 8 designates the casing, having a top and side boxings. The front strips of the side boxings are extended toward the open space of the casing to form, with the rear wall of said casing, channels or ways 9 at the inner side face portions, in which is mounted the blackboard, and by means of the counterbalancing-weights 10, located in the boxings, and the lower ends of cords 11, connected thereto, said cords passing over pulleys secured to the top boxing, the upper ends of the cords being secured to the top edge of the blackboard, whereby a vertical movement of the said blackboard is had, and the same is held in an adjusted position by means of said counterbalancing-weights.

If desired, springs may be substituted for the cords to draw the board up and suitable fastening means be provided to hold the board at any desired elevation. The casing 8 may be provided at its lower end with a chalk or crayon trough 12 and is preferably made twice the length of the board and consists of a back, a top rail, side rails in which the said guide-grooves are formed, and a bottom rail, forming the said trough 12. The lower half of the back of the casing is exposed when the blackboard is elevated to its highest extent, and I provide this portion with a writing-surface to form a blackboard, which may be concealed by sliding the adjustable blackboard down to its lowest position. A notch or recess 13 is formed in the bottom rail of the frame 2 to adapt the board to be easily moved; but a hand-grip of any preferred construction may be substituted therefor, if desired. It will be seen that by mounting the blackboard in the manner described an ornamental



structure is provided, while the board is adapted to be adjusted to secure the best light effects. The blind 7 may bear any desired instructive matter.

- 5 In Figs. 5, 6, and 7 I have shown a trans-  
portable casing 8<sup>a</sup>, adapted for lecture-hall,  
Sunday-school, and like use. This casing is  
mounted upon legs 14 and is composed of side  
rails having guide grooves or ways 9<sup>a</sup>, in  
10 which the blackboard is fitted to slide, a bot-  
tom rail 12<sup>a</sup>, which may be in the form of a  
chalk-trough, and a pocket-receptacle 15,  
adapted to receive the lower portion of the  
blackboard when the latter is slid down to  
15 its lowest position. The side rails are pro-  
vided with handles 16 for convenience in  
transporting the device from place to place  
and with springs 17 to bear upon the black-  
board and hold the same in adjusted position.  
20 The construction of the blackboard in both  
forms of the invention is essentially the same.

- In Fig. 8 I have shown a novel form of  
ruler adapted for use in connection with the  
improved blackboard. This ruler 18 is formed  
25 with shoulders 19 to bear upon the side rails  
of the blackboard, so as to hold said ruler  
firmly in position against slipping while in  
use.

- From the foregoing description, taken in  
30 connection with the accompanying drawings,  
the construction, mode of operation, and ad-  
vantages of my improved blackboard will be  
readily understood. Changes in the form,  
proportion, and minor details of construction  
35 may be made within the scope of the inven-

tion without departing from the spirit or sac-  
rificing any of the advantages thereof.

Having thus particularly described my in-  
vention, what I claim, and desire to secure by  
Letters Patent, is—

40 In a blackboard, the combination with a  
casing having an inclosing rear wall the  
lower portion forming a writing-surface, a  
top and opposite side boxings secured to said  
wall, and channels at the inner side face por- 45  
tions of the side boxings formed by means of  
the rear wall and by the extension of the  
front strips of the side boxings toward the  
center of the casing, pulleys secured in the  
top boxing, and a chalk-receptacle formed 50  
longitudinally in the sill of the casing, of a  
blackboard having marginal graduation-  
marks thereon, and a spring-screen secured  
to the upper portion of the blackboard, said  
blackboard mounted in said channels, and 55  
counterbalancing-weights located in said side  
boxings, and cords connected to the top of  
the blackboard and passing over the pulleys  
and connected to said counterbalancing-  
weights whereby a vertical adjustment of the 60  
said blackboard is had, substantially as speci-  
fied.

In testimony whereof I have hereunto set  
my hand in presence of two subscribing wit-  
nesses.

JOSEPH K. RITCHEY.

Witnesses:

J. MERRILL WILLIAMS,  
L. G. CROFT.