

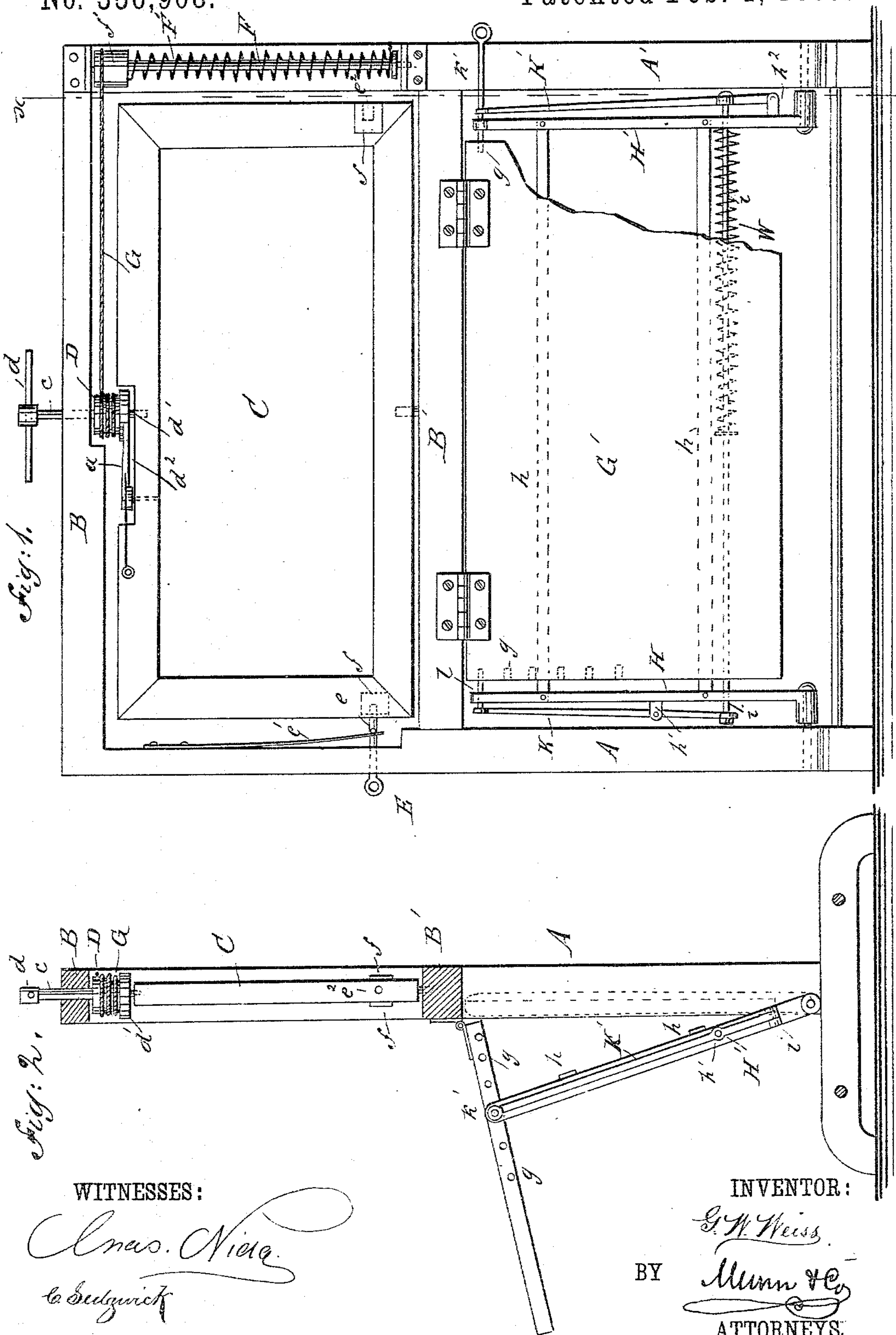
(No Model.)

G. W. WEISS.

COMBINED BLACKBOARD AND DESK.

No. 356,908.

Patented Feb. 1, 1887.



WITNESSES:

*Chas. Nida*  
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INVENTOR:

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BY

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# UNITED STATES PATENT OFFICE.

GEORGE W. WEISS, OF BROOKLYN, NEW YORK.

## COMBINED BLACKBOARD AND DESK.

SPECIFICATION forming part of Letters Patent No. 356,908, dated February 1, 1887.

Application filed October 11, 1886. Serial No. 215,865. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. WEISS, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved  
5 Combined Blackboard and Desk, of which the following is a full, clear, and exact description.

My invention relates to a combined blackboard and desk, and has for its object to provide a board capable of being automatically  
10 turned upon its axis to present at pleasure either face thereof to the front and in providing means for securing said board in alignment with the frame after each revolution.

15 The invention has for its object also to introduce below said board, within the same frame, a hinged leaf, and providing a device for locking the same when not employed in a vertical position, and supporting and locking the leaf  
20 when desired for use as a desk or table in an inclined or horizontal position.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out  
25 in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

30 Figure 1 is a front elevation of my combined blackboard and leaf, and Fig. 2 is a transverse vertical section through line  $xx$  of Fig. 1.

In the construction of my combined blackboard and desk I provide a frame consisting of  
35 the uprights  $A A'$ , top bar,  $B$ , and central stay or brace,  $B'$ . Within the said frame, between the top bar,  $B$ , and brace  $B'$  thereof, I centrally pivot a two-faced blackboard,  $C$ , the upper pivotal pin or axis,  $c$ , of which, extending  
40 upward through the top bar,  $B$ , is provided at its extreme end with a horizontal hand-bar,  $d$ , or other form of gripping device, and between the upper edge of the board and the under edge of the top bar the said axis  $c$  is further  
45 provided with a drum,  $D$ , the top bar,  $B$ , being usually recessed to receive the same.

Under the drum  $D$ , and attached to the upper axis,  $c$ , a ratchet-wheel,  $d'$ , is ordinarily provided, said ratchet-wheel being located below  
50 the top edge of the blackboard in a recess,  $d''$ , formed therein. Within said recess  $d''$  a

spring-actuated pawl,  $a$ , is pivoted, adapted to bear upon the top edge of the board and engage the said ratchet-wheel  $d'$ .

The standard  $A$  is apertured above the brace  
55  $B'$  to receive a pin,  $E$ , provided with a lug,  $e$ , against which lug a spring,  $e'$ , secured to said standard, is made to bear. Each end of the blackboard, at a point in alignment with said pin  $E$ , is provided with an aperture,  $e''$ , adapted  
60 to receive said pin, and upon opposite sides, over that portion of the board thus apertured, metallic plates  $f$  are secured, to prevent the pin  $E$  from wearing or marring the side and edge of said board upon entering its proper  
65 aperture when the board reverses, as will be hereinafter set forth.

To the right, upon the face of the standard  $A'$ , a torsion-spring,  $F$ , is coiled around a vertical shaft,  $F'$ , held to turn in suitable bearings secured to said standard, the upper end  
70 of the said spring being secured to a drum,  $f'$ , attached at the top of said shaft, while the lower end of said spring rests upon a plate fastened to the shaft  $F'$ , and is secured to the  
75 standard  $A'$ .

A cord,  $G$ , of catgut, wire, or other suitable material, is secured to the drum  $f'$  at one end, and, extending horizontally above the board, is made fast at its other end to the drum  
80  $D$  upon the axis  $c$ . The said spring, shaft, and cord may be dispensed with and an ordinary barrel-spring be used, in direct connection with the drum, instead, without departing from the spirit of my invention.  
85

In operating the board the drum  $D$  is turned until a strong tension is obtained upon the spring  $F$ . The pin  $E$  is then disengaged from the board, whereupon, through the bearing of the ratchet-wheel upon the pawl secured to  
90 said board and the expansion of the released spring, the blackboard is swung around and its other face presented, and as the end touches the spring-actuated pin  $E$  the said pin springs into the aperture therein, holding the board rigid  
95 again. The board can be thus made to turn upon its axis until the spring becomes relaxed, when, through the medium of the gripping-bar  $d$ , the tension may be renewed.

To the face of the central brace,  $B'$ , I hinge  
100 a leaf,  $G'$ , adapted to hang, when in its normal position, parallel therewith between the said



uprights A and A', the said leaf being provided along its ends, from the top to about the center, with a series of apertures, *g*, in the same longitudinal line.

5 Between the ends of the leaf G' and the uprights A and A', and to the inner side of said standards near the bottom, are pivoted braces H H', adapted to extend upward within a short distance of the central brace, B', the said  
10 braces H and H' being properly stayed by the longitudinal bars *h*, and each provided with an aperture at the upper end.

The standard H, next the upright A, is provided centrally with a lug, *h'*, in which is ful-  
15 crumed a lever, K, having an integral inwardly-extending pin, *l*, purposed to enter the top aperture of the said pivoted standard H and the upper aperture in the leaf G'. The opposite standard, H', is also provided with a lug, *h''*,  
20 located near its pivotal point, to which lug is pivoted a lever, K', whose upper end is also provided with an inwardly-extending pin, *l'*, the purpose of which is to enter the top aperture of the standard H' and the upper aper-  
25 ture of the leaf at that end. The said pin *l'* is, however, made to extend outwardly beyond the upright A and terminate in a handle. The two levers K and K' are connected by a horizontal bar, *i*. As will be seen from the above  
30 description, the table is now securely held in its normal position.

When wanted for use as a desk, the pin *l'* is drawn outward, and by means of the connected levers the opposite pin, *l*, is also simul-  
35 taneously disengaged from the leaf. With the other hand the leaf is lifted until the desired inclination is reached, the pivoted standards being meanwhile brought forward parallel with the edge thereof. The pin *l'* is then made  
40 to engage the proper aperture in the said edge of the leaf upon one side, whereupon the pin *l* also engages a similar aperture upon the other, and a complete desk is formed.

The horizontal connecting-rod *i* is provided  
45 with a spring, W, attached thereto to automatically engage the pins *l'* and *l* with the end apertures, *g*, of the leaf G'.

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

1. The combination, with the pivoted board C, having its upper pivot, *c*, provided with a handle, *d*, drum D, and ratchet-wheel *d'*, and a spring-actuated pawl, *a*, pivoted to said board, of a torsion-spring, F, held upon a ver-  
50 tical rod, F', provided with an attached drum, *f'*, said drum *f'*, connected with the drum D of the pivot *c* by a rope, G, and means for locking said board, substantially as shown and de-  
55 scribed, and for the purpose herein set forth.

2. In a combined blackboard and desk, the leaf G', hinged to the center cross-bar, B', between the uprights A A', and provided with means, substantially as herein described, for locking said leaf in a vertical position and  
60 supporting and locking the same in an inclined or horizontal position, as set forth.

3. In a combined blackboard and desk, the combination, with the hinged leaf G', provided with the side apertures, *g*, of the united piv-  
70 oted braces H and H', the levers K K', pivoted to said braces and provided with locking-pins *l* and *l'*, the rod *i*, uniting said levers, and the spring W, as shown and described, whereby the said leaf can be locked in a vertical posi-  
75 tion and supported and locked in an inclined or horizontal position, as set forth.

4. A combined blackboard and desk consisting of the uprights A A', top bar, B, and central brace, B', the leaf G', hinged to said  
80 brace, the pivoted braces H H', the attached and connected levers K K', carrying locking-pins *l* and *l'*, the pivoted board C, provided with the spring-actuated drum D, the ratchet-wheel *d'* upon the pivot *c*, and the pawl *a*, piv-  
85 oted to said board, and means for locking said board, substantially as shown and described.

GEORGE W. WEISS.

Witnesses:

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