(No Model.)

H. W. GROEBL.
ADJUSTABLE DESK AND SEAT.

No. 303,002. Patented Aug. 5, 1884.

Fig. 1.

Fig. 3.

Fig. 2.

Fig. 4.

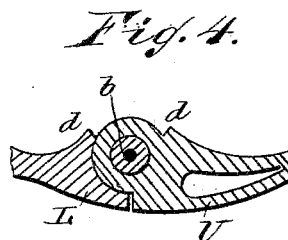*Fig. 5.*
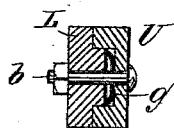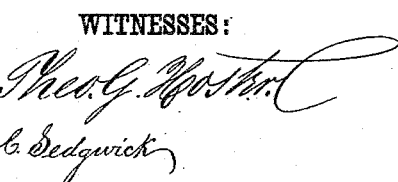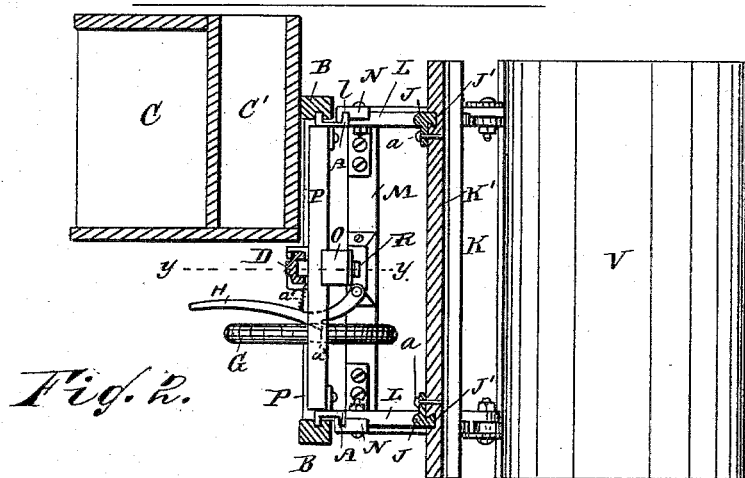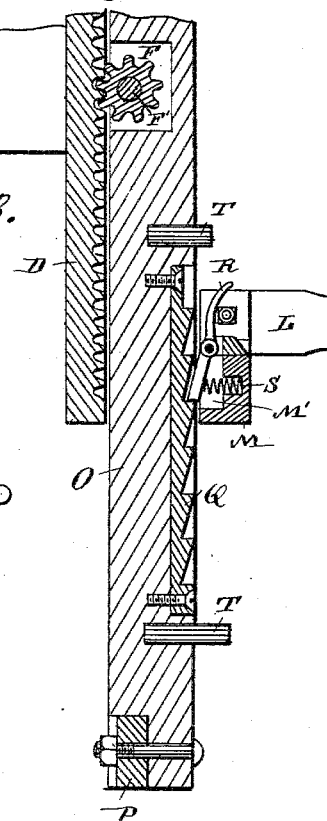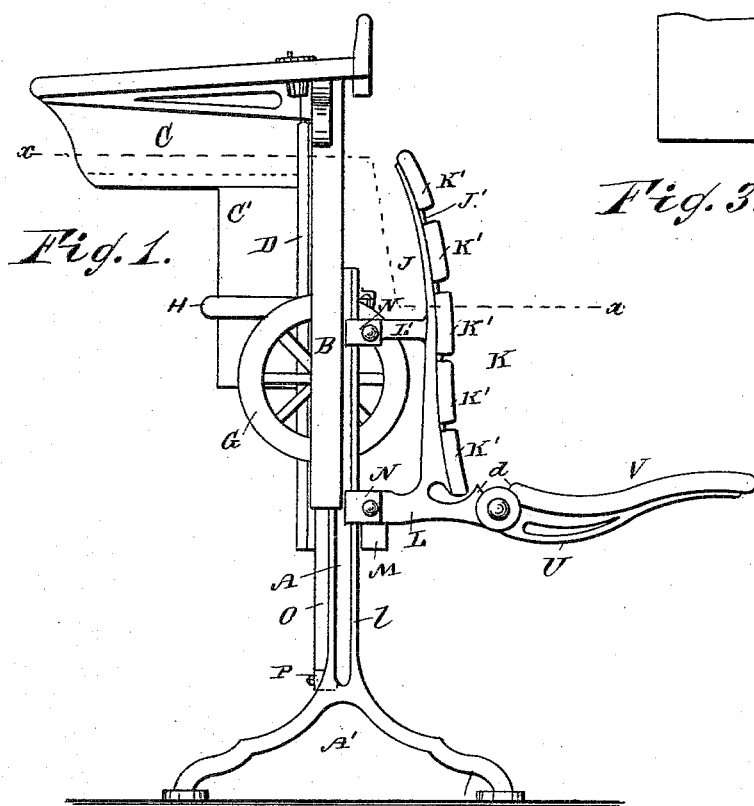
UNITED STATES PATENT OFFICE

HERMAN WILLIAM GROEBL, OF VINCENNES, INDIANA, ASSIGNOR TO HIM-
SELF, JACOB WEISSENBACH, EMIL GRILL, AND FREDERICK MILLER, ALL
OF SAME PLACE.

ADJUSTABLE DESK AND SEAT.

To all whom it may concern:

Be it known that I, H. WILLIAM GROEBL, of Vincennes, in the county of Knox and State of Indiana, have invented a new and Improved
5 Adjustable Desk and Seat, of which the fol-lowing is a full, clear, and exact description.

My invention relates to improvements in adjustable desks and seats; and it consists in the peculiar construction and arrangement of
10 the parts, as hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate cor-
15 responding parts in all the figures.

Figure 1 is a side view of my improved ad-justable desk and seat. Fig. 2 is a sectional plan view of the same, taken on the line $x\,x$, Fig. 1. Fig. 3 is an enlarged cross-sectional
20 view on the line $y\,y$, Fig. 2. Fig. 4 is an en-larged longitudinal sectional view of the seat-joint. Fig. 5 is a cross-sectional elevation of the same.

Standards A, having a U-shaped cross-sec-
25 tion, are secured to bases A', and on one flange of each standard A the grooved legs B of the desk C are held to slide vertically. A rack, D, projects downward from the bottom of the desk and engages with a pinion, F, mounted on the
30 shaft F', journaled in the bar O, and having a hand-wheel, G, with which a locking-lever, H, engages, whereby the desk can be raised or lowered by turning the hand-wheel.

The desk C is provided with a pocket, C', on
35 its under side, which pocket is open at the side, and is adapted to receive books, slates, &c. The standards J of the seat-back K are pro-vided with half-dovetails J', which act as clamps and pass into corresponding half-dovetail
40 grooves in the rear sides of the slats K', and screws a are also passed through the standards J into the rear surfaces of the slats K'. The standards J are provided at the bottom and at about half their height with backwardly-pro-
45 jecting arms L L', of which the lower arms, L, are united by a bar, M. At the ends of the arms L L' hook-blocks N are formed, which embrace the flanges of the standards A, and are adapted to slide vertically on the said

standards. A standard, O, secured to a cross- 50 bar, P, uniting the bases A', has a rack, Q, pro-vided with upwardly-projecting teeth counter-sunk in that side facing the seat-back K. In a recess, M', in the rear surface of the bar M a latch-lever, R, is pivoted, the lower end of 55 which is pressed against the teeth of the rack Q by a spring, S, the upper handle end of the latch projecting above the bar M. Check-studs T, against which the bar M can strike, project from the standards O at the top and bottom of 60 the rack Q. The front ends of the lower arm, L, project beyond the front surface of the seat-back, and to the said ends of the arms L the arms U, on which the seat V is secured, are pivoted by bolts b. The arms L and U are 65 provided with check-shoulders d on the upper edges, which check-shoulders come in contact when the seat is raised or swung upward, and prevent the outer edges of the seat from com-ing in contact with the seat-back. The pivot- 70 ed ends of the arms L and U are rabbeted, as shown in Fig. 5, and between the rabbeted joint parts a concave steel spring-washer, g, is held for the purpose of holding the seat in po-sition at any inclination, and to prevent rat- 75 tling of the joints.

The desk can be adjusted higher or lower by turning the hand-wheel G, and is locked in po-sition automatically by the lever H. If the seat is drawn upward, the lower end of the latch- 80 lever R slides over the teeth of the rack Q, and if the seat is released it is locked in position automatically by the latch R. If the seat is to be lowered, the upper end of the latch R must be pressed toward the standard O to dis- 85 engage the lower end from the teeth of the rack. The seat can thus be adjusted independently of the desk, and the desk can be adjusted ver-tically independently of the seat.

School-seats, school-desks, office-desks, or 90 any other kinds of desks can be constructed in the manner herein described.

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

1. The combination, with the flanged stand- 95 ards A, secured to the bases A', recessed stand-ard O, and grooved legs B, of the desk C, each leg being adapted to slide on one of the flanges

of the standards A, of the rack D, projecting downwardly from the desk, pinion F, shaft F', journaled in the standard O, hand-wheel G, and spring-pressed locking-lever H, all construct-
5 ed and operated as set forth.

2. The combination, with the seat-back J, having arms L L', and recessed bar M, uniting the arms L, of the bases A', flanged standards A, hooked blocks N, standard O, provided with
10 the rack Q, check-studs T, latch R, and spring S, substantially as shown and described.

3. In a combined desk and seat, the combination, with the standards A and O, of the desk C, the seat-back K, the seat V, the arms L L'
15 of the seat-back, the bar M, uniting the arms L, the rack Q on the standard O, and the latch-lever R in the bar M, substantially as herein shown and described.

4. The combination, with the flanged standards A, of the desk C, the sliding legs B, the 20 rack D, the pinion F, the hand-wheel G, the lever H, the sliding seat K V, the arms L L', provided with hook-blocks N, the standard O, the rack Q, and the latch R, substantially as herein shown and described.

HERMAN WILLIAM GROEBL.

Witnesses:
JACOB WEISSENBACH,
BERNARD WOLTER.