No. 827,245. PATENTED JULY 31, 1906.

H. G. LIPPARD.

COMBINED DESK AND SEAT.

APPLICATION FILED MAR. 1, 1904.

Fig. 1.

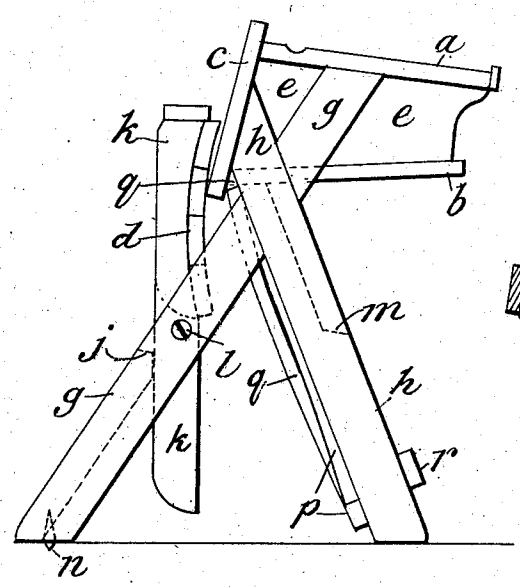


Fig. 2.

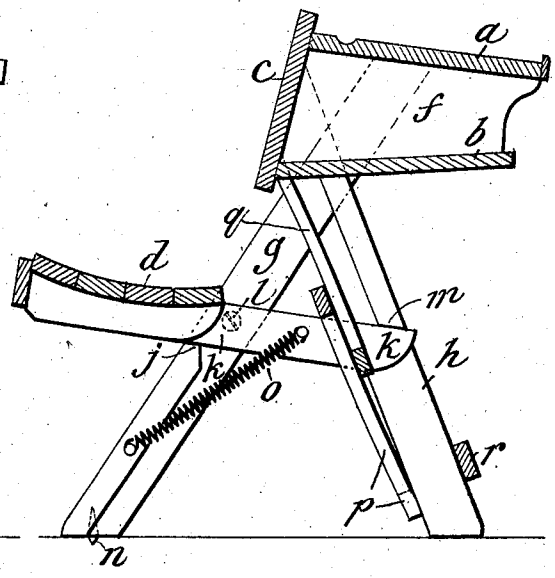
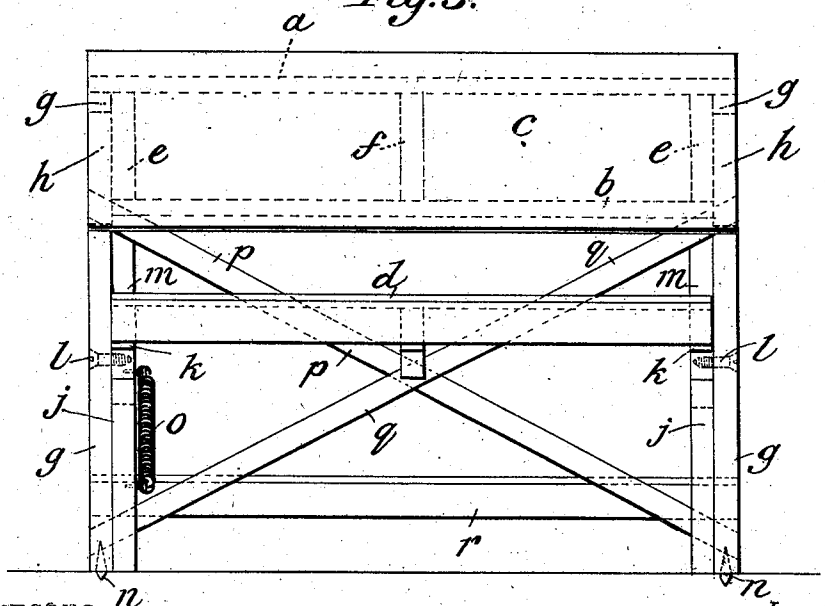


Fig. 3.



WITNESSES:

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COMBINED DESK AND SEAT.

No. 827,245. Specification of Letters Patent. Patented July 31, 1906.

Application filed March 1, 1904. Serial No. 196,083.

To all whom it may concern:

Be it known that I, HENRY G. LIPPARD, a citizen of the United States, residing at Woodleaf, in the county of Rowan and State of North Carolina, have invented new and useful Improvements in a Combined Desk and Seat, of which the following is a specification.

This invention relates to a combined desk and seat of new or improved construction for use in school-rooms in which desks are arranged in front of one another in rows. The upright supports which carry a desk carry also the seat for the occupants of the desk next in front in the row.

The combined desk and seat of the present invention can be made economically, while possessing durability, and is believed to meet the requirement of such furniture more nearly than any combined desk and seat heretofore devised.

Sometimes it is desired to have the school-furniture removable in order that the school-room may be used for other purposes or may be properly swept, and the advantage of removability can be secured by means of the present invention without sacrificing the ability to meet other requirements.

The new or improved desk and seat can be made light in weight, which is specially advantageous when the same is to be removable.

The desk and seat, although light in weight and readily removable, need not be loose on the floor. Moreover, the construction can be such as to facilitate the ingress and egress of persons into and out of the seats when desks are placed in front of one another in a row.

The accompanying drawings, which form part of this specification, illustrate what is considered the best mode of carrying the invention into effect, it being understood that modifications, omissions, and additions can be made so long as the substance of any one or more of the hereinafter-written claims is taken.

Figure 1 is an end view of the new or improved desk and seat in what is considered its best form, the seat being raised. Fig. 2 is a sectional view in a plane parallel with that of Fig. 1 of the desk and seat with the seat down, and Fig. 3 is a front view of the same from the seat side with the seat down.

The essentials of a combined desk and seat are the upright supports, the table, and the seat. Below the table *a* there is shown a shelf *b* for receiving the pupil's books and papers when these are not in use; but even if this shelf should be omitted there would still be a desk. As shown also, there is a board *c*, which forms a back for the seat *d* and closes the space between the table *a* and shelf *b*, and the said space is further closed by the end pieces *e* and divided by the partition *f*.

The upright supports are made wide at the bottom and narrow at the top and are advantageously constructed in the form of inclined pieces *g* and *h*, respectively, crossed near their upper ends, each support consisting of two such crossed pieces. The table *a* overlies the tops of the upright supports, resting, as shown, upon the upper ends of the two cross-pieces *g*, and the seat-back *c* overlaps the front edges of said supports, being secured, as shown, to the upper ends of the two cross-pieces *h*.

The seat-back *c* is best inclined slightly from the vertical, and the seat *d*, pivoted to the pieces *g*, is advantageously arranged with the axis of rotation in or so nearly in the plane of the seat-back as that the seat can be turned substantially vertical, (see Fig. 1,) and consequently not impede the ingress and egress of persons into and out of the space between desks.

To limit the downward motion of the seat, stops are provided, which most advantageously comprise the stops *j*, located on the pieces *g* below the heads *k* of the seat *d* in proximity to the pivots *l*, and the stops *m*, located on the pieces *h* above the heads *k*, (which are prolonged, as shown, behind the pivots *l*,) the stops *m* being separated from the pivots *l* by a distance several times as great as that between the stops *j* and said pivots. This arrangement of stops relieves the pivots of stress which they would otherwise have to bear, while at the same time it is not necessary for the stops *j* to be so far forward as to impede a person's ingress into or his egress from the space between desks.

In order to render the desk self-supporting, the upright supports at the bottom are made to extend on one side of the pivots *l*—namely, on the front or seat side thereof—to beyond the middle of the seat and on the other side to beyond the middle of the table *a*, so that the weight of a person sitting on the seat *d* or leaning on the table *a* will fall within the supporting-base, and consequently the desk will

stand alone—that is, without being secured to the floor—whether the seat is occupied or not.

To prevent the desk and seat from sliding, spikes *n*, which are pointed enough to indent the floor, are placed in the bottoms of the upright supports in such manner as slightly to project, and in order that the said spikes *n* may take good hold on the floor they are arranged on the seat side of the pivots *l*, the supports extending, as said before, beyond the middle of the seat.

To facilitate ingress of a person into and his egress from the space between desks, the seat is provided with lifting-spring *o*, (shown in Fig. 2 as a spiral tension-spring,) and this spring is secured at one end to one of the upright supports at a point on the seat side of the pivots *l* and at the other end to the corresponding seat-head *k* at a point on the desk side of said pivots. When a person sitting on the seat rises, the spring at once raises the seat and leaves the space between desks clear for the person to pass out.

In order more effectively to keep the upright supports in place, oppositely-inclined cross-braces are employed, and in order that they may interfere as little as possible with the comfort of the person sitting behind the desk *a* or of the person entering and leaving the space between said desk *a* and the next desk in the row the said oppositely-inclined cross-braces *p* and *q* are disposed in a plane parallel with the cross-pieces *h* of the upright supports, their lower ends being fastened to the front edges of the pieces *h* and their upper ends to the lower part of the seat-back *c*. A horizontal cross-brace *r* may be provided instead of or in addition to the oppositely-inclined cross-braces *p q*. Being secured on the rear edges of the pieces *h*, the cross-brace *r* is in position to serve as a foot-rest.

The space under the seat between the pivot-bearing cross-pieces *g* is best left open, as shown, so as not to impede the movements of the person in the space between desks.

In order that the bottom of the upright supports when the latter are composed of inclined pieces crossed near their upper ends may extend to beyond the middle of the seat *d* on the seat side of the pivots *l* and to beyond the middle of the table *a* on the desk side of said pivots without extending farther than necessary, and so being in the way, the cross-pieces *g h* are inclined at different angles, the pivot-bearing cross-pieces *g* being the more nearly horizontal and the other cross-pieces *h* being the more nearly vertical.

In use the combined desks and seats are arranged in front of one another in rows. The occupant or occupants of the seat *d* enter the space between desks while the seat *d* is elevated and turn down the said seat to seat themselves thereon. Their weight holds down the seat against the influence of the spring *o* and also holds the spikes *n* firmly in engagement with the floor. When the persons rise, their weight being removed, the spring *o* raises the seat partly or even quite to the vertical position, thus leaving clear the space between desks.

The user or users of the desk or table *a* sit on the seat which is pivoted to the upright supports of the desk next behind in the row. They may place their feet on the foot-rest brace *r*.

For sweeping or for clearing the room each combined desk and seat can readily be lifted and moved to the place desired.

I claim as my invention or discovery—

1. A combined desk and seat, composed of upright supports in the form of inclined pieces crossed near their upper ends so as to make the supports wide at the bottom and narrow at the top, a table carried by said supports, a seat hinged thereto, and oppositely-inclined braces connecting two of the cross-pieces and disposed in a plane inclined to the vertical and parallel with that of the two last-mentioned cross-pieces, substantially as described.

2. A combined desk and seat, composed of a table, upright supports in the form of inclined pieces crossed near their upper ends, a seat pivoted to two cross-pieces and serving to interconnect them, and braces interconnecting the other two cross-pieces and fastened thereto below the seat-level, the space under the seat between the pivot-bearing cross-pieces being left open, substantially as described.

3. A combined desk and seat, composed of upright supports in the form of pieces inclined at different angles and crossed near their upper ends so as to make the supports wide at the bottom and narrow at the top, a table carried by said supports, a seat-back secured to said supports, a seat pivoted to two of said pieces at a horizontal distance from the lower ends thereof about equal to the width of the seat, so that the weight of a person sitting on the seat falls within the supporting-base, stops arranged behind the front edges of the pivot-bearing pieces, so that when the seat is raised the stops do not impede a person's ingress and egress, and oppositely-inclined cross-braces connecting the other two cross-pieces and disposed in a plane parallel with that of the latter, the space under the seat between the pivot-bearing cross-pieces being left open, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY G. LIPPARD.

Witnesses:
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J. D. HEATHMAN