E. G. DURANT & T. KANE.

SCHOOL-DESK.

No. 192,641. Patented July 3, 1877.

Fig. 1.

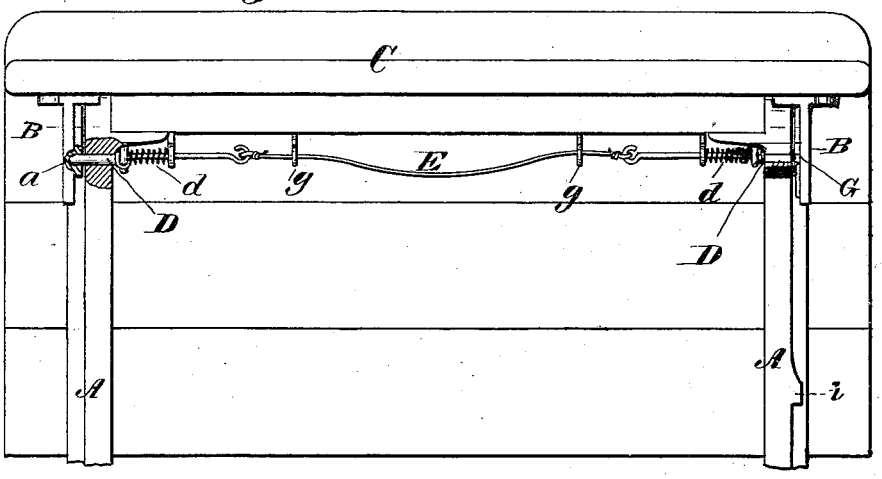

Fig. 2.

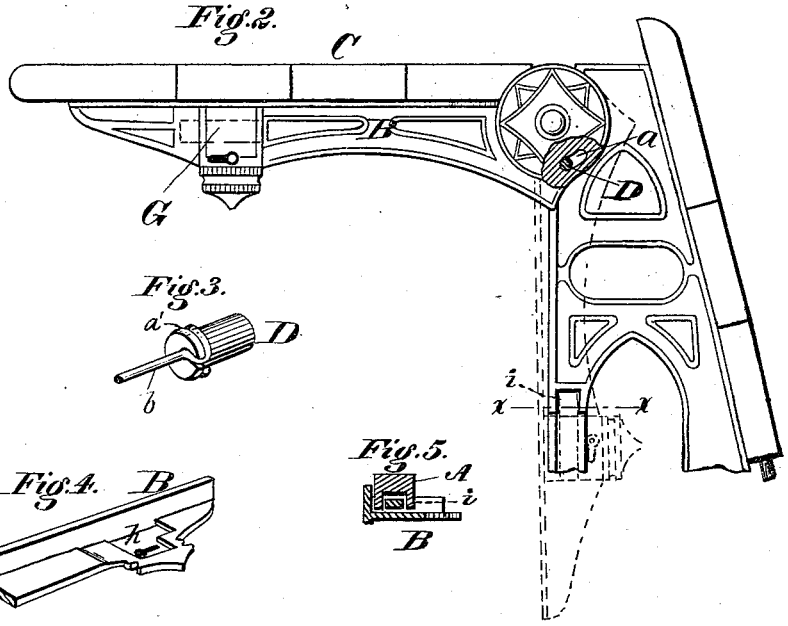

Fig. 3.

Fig. 4.

Fig. 5.

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EDWARD G. DURANT, OF RACINE, WISCONSIN, AND THOMAS KANE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. **192,641**, dated July 3, 1877; application filed December 15, 1876.

To all whom it may concern:

Be it known that we, EDWARD G. DURANT, of the city and county of Racine, in the State of Wisconsin, and THOMAS KANE, of Chicago in the county of Cook and State of Illinois, have invented certain Improvements in Hinged-Top School-Desks, of which the following is a specification:

The first part of the invention relates to the manner of sustaining the hinged top in position for use; and consists in the combination of two automatic spring-bolts mounted in the standards, and engaging in the arms which sustain the top or lid with a connecting cord or wire, by means of which the two bolts may be unlocked simultaneously.

The second part of the invention relates to means for securing the top down, in order to prevent it from being raised at improper times or by improper persons; and consists in constructing one of the top or lid arms with a recess, and a key-lock seated therein, and in providing one of the standards with a lug or equivalent for the lock-bolt to engage with when the lid is turned down.

Figure 1 represents a rear elevation of the upper part of the desk, the lid being shown in its elevated position, and portions of the lid and standard broken away to expose the lid-sustaining bolt; Fig. 2, a side elevation of the same; Fig. 3, a perspective view of one of the lid or top sustaining bolts, showing the manner in which its body and stem are united; Fig. 4, a perspective view, showing the recessed top or lid arm to receive the lock; Fig. 5, a cross-section, showing the manner in which the lid or top is locked down.

The desk consists, as usual, of two metal standards or side frames, A, sustaining the seat, and two metal arms, B, pivoted to the standards and sustaining the desk lid or top C, which may be turned up in position for use or turned down against the back of the standards, as indicated by the dotted lines in Fig. 2. Through each standard there is passed a horizontal sliding bolt, D, to engage with and sustain the adjacent lid-arm. Each arm is provided, as shown in Figs. 1 and 2, with an elongated recess or groove, *a*, to receive the locking-bolt, so located that while the bolt engaging therein will hold the lid naturally in the proper position for use, its elongation permits the lid to be raised above its normal or natural position without being unlocked. This arrangement to permit the raising of the lid or top is for the purpose of giving the student ready access to the book rack or shelf, which is commonly located between the standards. Each of the locking-bolts D is provided with an inside shoulder, *a'*, and with a stem or spindle, *b*, passing through a guiding-eye, *c*, and provided with a spiral spring, *d*, which is mounted upon the stem between the guide and the shoulder, so that it urges the bolt outward and causes it to lock automatically in the arm when the lid or top is raised. The inner ends of the two bolts D we connect by a cord or wire, E, passing through guides *g*, as shown in Fig. 1, so that by drawing on the cord both bolts are drawn inward, and the top released and permitted to turn down. Upon raising the top to its proper position both bolts lock automatically and hold it in place. The two automatic bolts, connected as shown, form a cheap, simple, and reliable fastening to sustain the lid, permit the same to be readily released with one hand, and are not liable to be operated by accident or design on the part of persons standing near, inasmuch as the cord can only be reached readily by the person seated at the desk.

For the purpose of securing the lid down when desired, we provide one of the metal lid-arms, B, near its rear end, with an inside recess, *h*, as shown in Fig. 4, and seat therein, as shown in Figs. 2 and 5, a flat key-lock, G, a key-hole for which is cut through the arm to permit the insertion of the key from the outside.

On the outside of the corresponding standard, past which the arm laps when the lid or top is turned down, we form a flange, *i*, into which the lock-bolt may be thrown by means of the key, as shown by Fig. 5, and in dotted lines in Fig. 2, thereby holding the lid down firmly against the standards. The lock, applied in the manner shown, adds but little to the cost of the desk, and is secured and protected from injury. Instead of seating the lock in a recess in the arm, the recess may be made in the standard, and the lock seated therein and arranged to engage with the arm.

We are aware that the use of two pivoted locking-latches at opposite ends of a desk, in combination with two rigid operating-rods, and a central pivoted lever to connect said rods, is old, but by our arrangement we are enabled to greatly simplify and cheapen the desk, while at the same time we render the action of the devices more reliable.

In all cases the cord, wire, or chain E in our desk is to extend directly from one locking device to the other, without the employment of levers or other intermediate devices.

Having thus described our invention, what we claim is—

1. In school-desk, the combination of the standards A and pivoted arms B, with the sliding spring-bolts D, and the cord or other flexible connection extending directly from one bolt to the other.

2. In a school-desk, the combination of a hinged falling top, two locking devices, D, located at opposite ends of the same, and a cord or similar flexible connection extending directly from one of said devices to the other, in the manner shown.

3. In a school-desk, the combination of a metal standard, A, a hinged metal lid-arm, B, and the key-lock G, seated in a metal socket, *h*, substantially as shown and described, and serving to fasten the arm down.

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