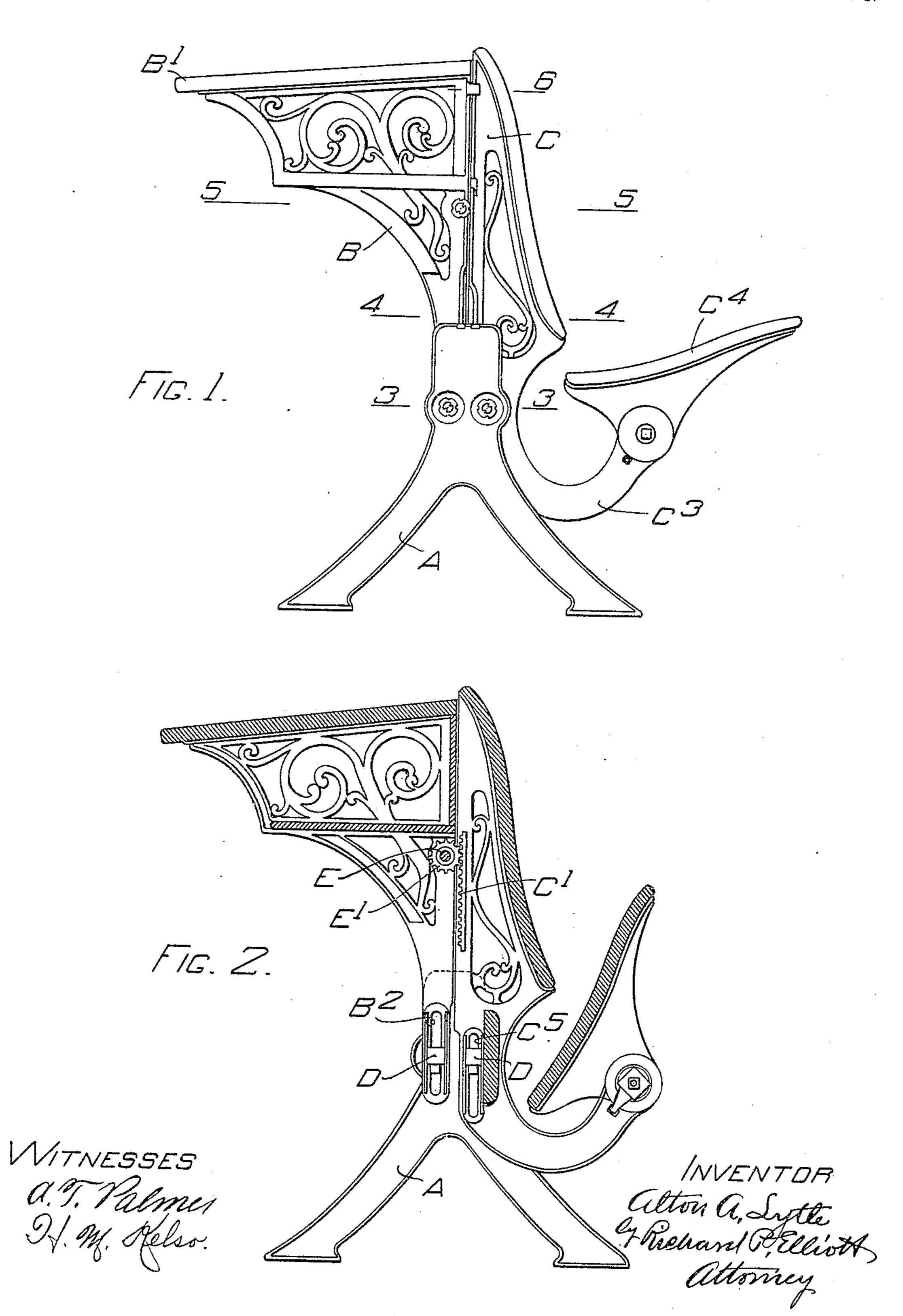
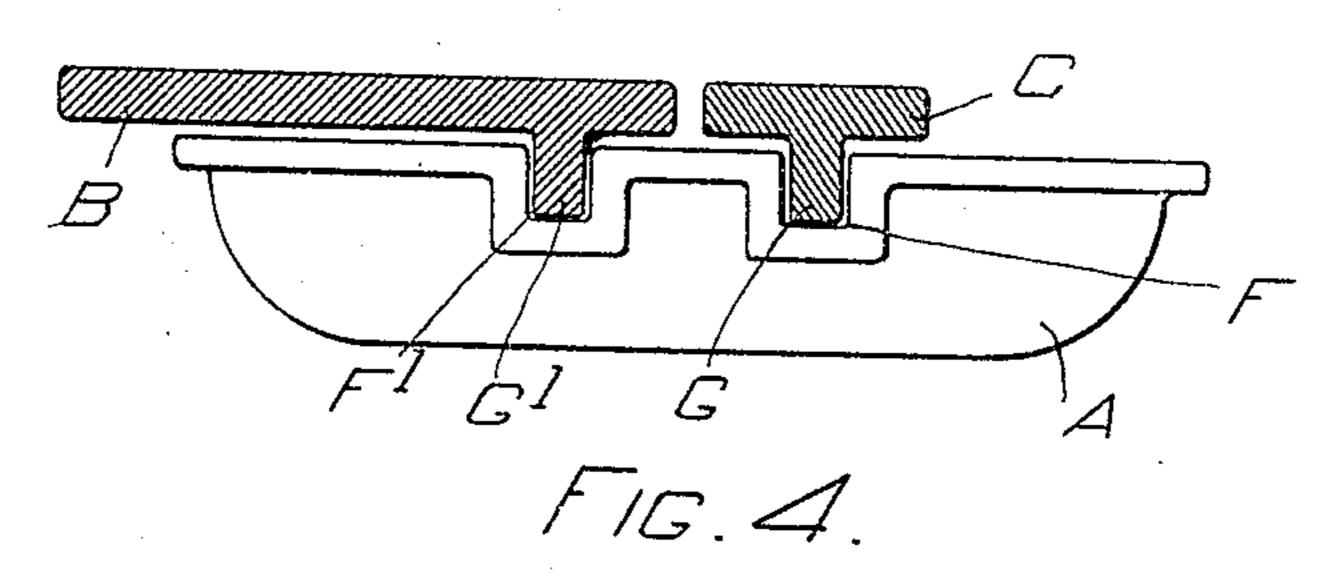
A. A. LYTLE. ADJUSTABLE SCHOOL DESK AND SEAT. APPLICATION FILED JUNE 6, 1904.

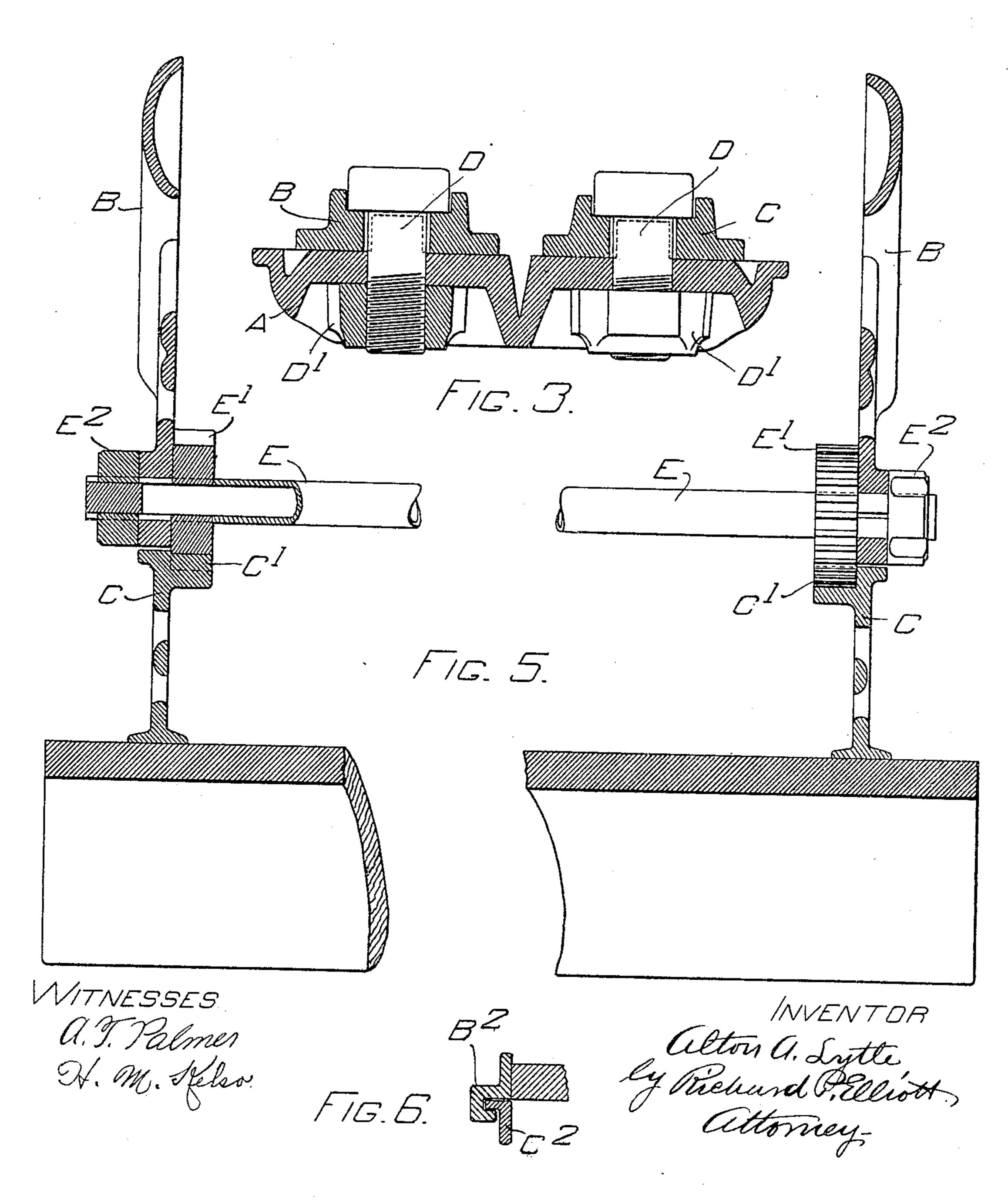
2 SHEETS—SHEET 1.



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2 SHEETS-SHEET 2





UNITED STATES PATENT OFFICE.

ALTON A. LYTLE, OF GRAND RAPIDS, MICHIGAN.

ADJUSTABLE SCHOOL DESK AND SEAT.

No. 795,528.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed June 6, 1904. Serial No. 211,296.

To all whom it may concern:

Be it known that I, ALTON A. LYTLE, a citizen of the United States, residing at Grand Rapids, county of Kent, and State of Michigan, have invented certain new and useful Improvements in Adjustable School Desks and Seats, of which the following is a specification, reference being had to the drawings accompanying the same.

The object of my invention is to produce an adjustable school desk and seat combined that can be economically made and have the

fewest possible number of parts.

A further object of my invention is to produce a combined adjustable seat and desk wherein the seat and desk can be adjusted independently of each other by the same ad-

justing means.

In the drawings accompanying this specification, Figure 1 is a side elevation of my improved desk and chair. Fig. 2 is a sectional side elevation of same, showing the guiding and adjusting mechanism. Fig. 3 is a sectional elevation of the supporting and adjusting standards and clamping means of both the seat and desk through line 3 3, Fig. 1. Fig. 4 is a partial sectional plan view through line 44, Fig. 1. Fig. 5 is a sectional plan view through line 5 5, Fig. 1, and shows the adjusting mechanism. Fig. 6 is a partial sectional elevation on line 6 6, Fig. 1, and shows the method of interlockingly guiding the desk and seat standards one from the other.

In the drawings, A represents the supporting-standards, which may be secured to the floor or other suitable supporting means.

B represents the adjustable supporting means for the desk, and C the adjustable sup-

porting means for the seat.

The adjustable supports B and C of the desk and seat, respectively, are attached to the fixed support A by the bolts D D, the heads of which bolts are guided in the elongated recesses B² and C⁵, their other ends being screw-threaded and having mounted thereon the nuts D' D'.

E represents a suitable rod which extends from one set of the adjustable supports to the other and is mounted in bearings in the supports B. The rod E has mounted thereon pinions E' E', which enmesh with the racks C' C', attached to the adjustable seat-supports C C. Fixedly secured to the outer ends of the rod E are blind-nuts E² E², designed for the purpose of receiving a wrench to revolve

the rod E. The adjustable standards B have interlocking lugs B² attached thereto, which interlock around the edge of raised guides C², attached to the side walls of the adjustable standards C.

The operation of my improved adjusting device is as follows: When it is desired to adjust the seat C4, the adjustable standards B being tightened by means of the bolts D, the standards C are loosened by unscrewing the nuts D' on the fastening-bolts D. The seat may then be raised or lowered by turning the rod E with a suitable wrench placed upon the blind-nuts E². The turning of the rod E causes the pinions E' E', which enmesh with the racks C' C', to raise or lower the adjustable seat-standards C. When adjusted to the proper height, the bolts D are tightened and the adjustable standards C thus secured in their adjusted position. When it is desired to adjust the desk-standards B, the nuts on the bolts D, which fasten or clamp said standards, are loosened, the shaft E revolved, which will cause the pinions E' E' to travel up or down upon the racks C' C', and thereby raise or lower the desk B'. When the desk is adjusted to the desired position, the bolts D used to clamp it are tightened, when the standards supporting the seat and desk will be firmly clamped and interlocked each with the other.

The sectional view Fig. 4 shows guide-grooves F and F' on the upper end of the fixed standard A, adapted to receive projecting guide-ribs G and G', secured to the outer faces of the adjustable standards C and B, respec-

tively.

The form of combined desk and seat is immaterial, as my invention consists primarily in a combination adjustable desk and seat provided with a single adjusting means adapted to independently adjust either the desk or the seat, as desired.

What I claim is—

1. In an adjustable desk and chair, comprising supporting-standards; a vertically-adjustable desk-standard mounted thereon; a vertically-adjustable chair-standard mounted thereon; coacting means for adjusting both said vertical standards, comprising a shaft having pinions thereon mounted on one of said adjustable standards, and racks having gear-teeth thereon mounted on the other of said adjustable standards, whereby either one of said adjustable standards may be adjusted from the other.

- 2. An adjustable desk and chair, comprising supporting-standards; a vertically-adjustable desk-standard mounted on said supporting-standards; a vertically-adjustable chair-standard mounted on said supporting-standards; coacting means for adjusting both said adjustable standards, a portion of which is mounted in one of said adjustable standards, and the other portion of which is mounted on the other of said adjustable standards; means whereby either of said adjustable standards may be adjusted from the other; and means for clamping both said adjustable standards independently of the other.
- 3. A combination adjustable desk and chair, consisting of supporting-standards; clamping means mounted on said supporting standards; a vertically-adjustable deskstandard mounted on said supporting-standards and adjustable thereon; a verticallyadjustable chair-standard mounted on said supporting-standards and adjustable thereon, a revoluble shaft mounted in one of said vertically-adjustable standards; pinions mounted at either end of said revoluble shaft; racks having gear-teeth mounted on the other of said vertically-adjustable standards and adapted to enmesh with the pinions; means for revolving said revoluble shaft; means for clamping both said vertically-adjustable standards independently of the other, where-

by when one of said adjustable standards is clamped the other of said adjustable standards upon being loosened may be adjusted vertically from the standards which are

clamped.

4. In a combination adjustable desk and chair, comprising supporting-standards and movable standards mounted thereon; a desk and chair supported by said movable standards; and adjusting means mounted on one of said movable standards arranged to act on means on the other of said movable standards to independently raise and lower either of said movable standards.

5. A combination adjustable chair and desk support, comprising fixed standards and adjustable supporting-standards movably attached thereto; a desk and a chair supported on said adjustable standards; and means revolubly mounted in one of said ad-

justable standards arranged to enmesh with means on the other of said adjustable standards, and adapted to adjust both said standards.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses this the 30th day of April, 1904.

ALTON A. LYTLE.

Witnesses:

GEO. W. BOWEN, B. E. Wilson.