(No Model.)

J. HAUSS.

SCHOOL DESK AND SEAT.

No. 506,496. Patented Oct. 10, 1893.

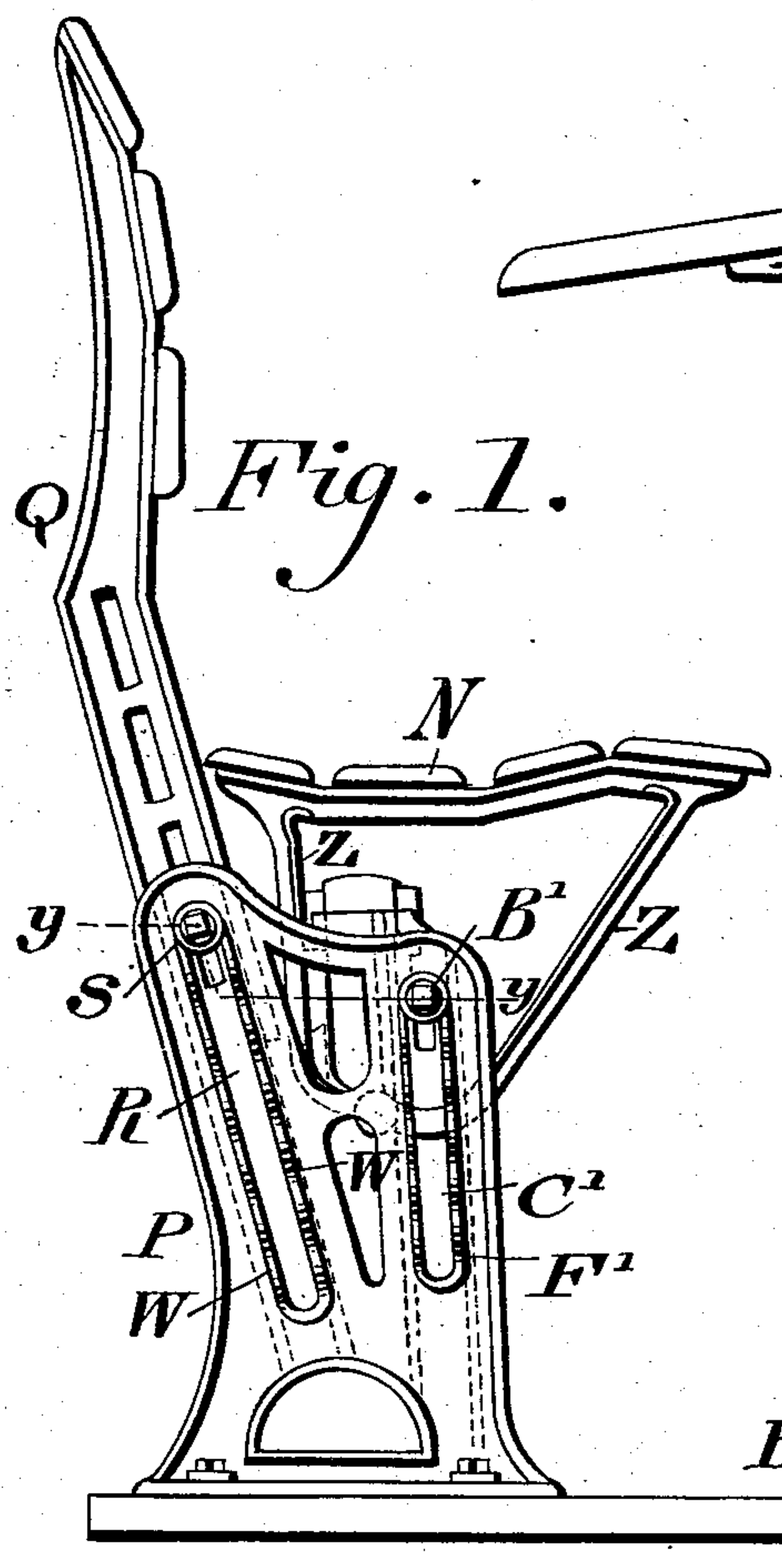

Fig. 1.

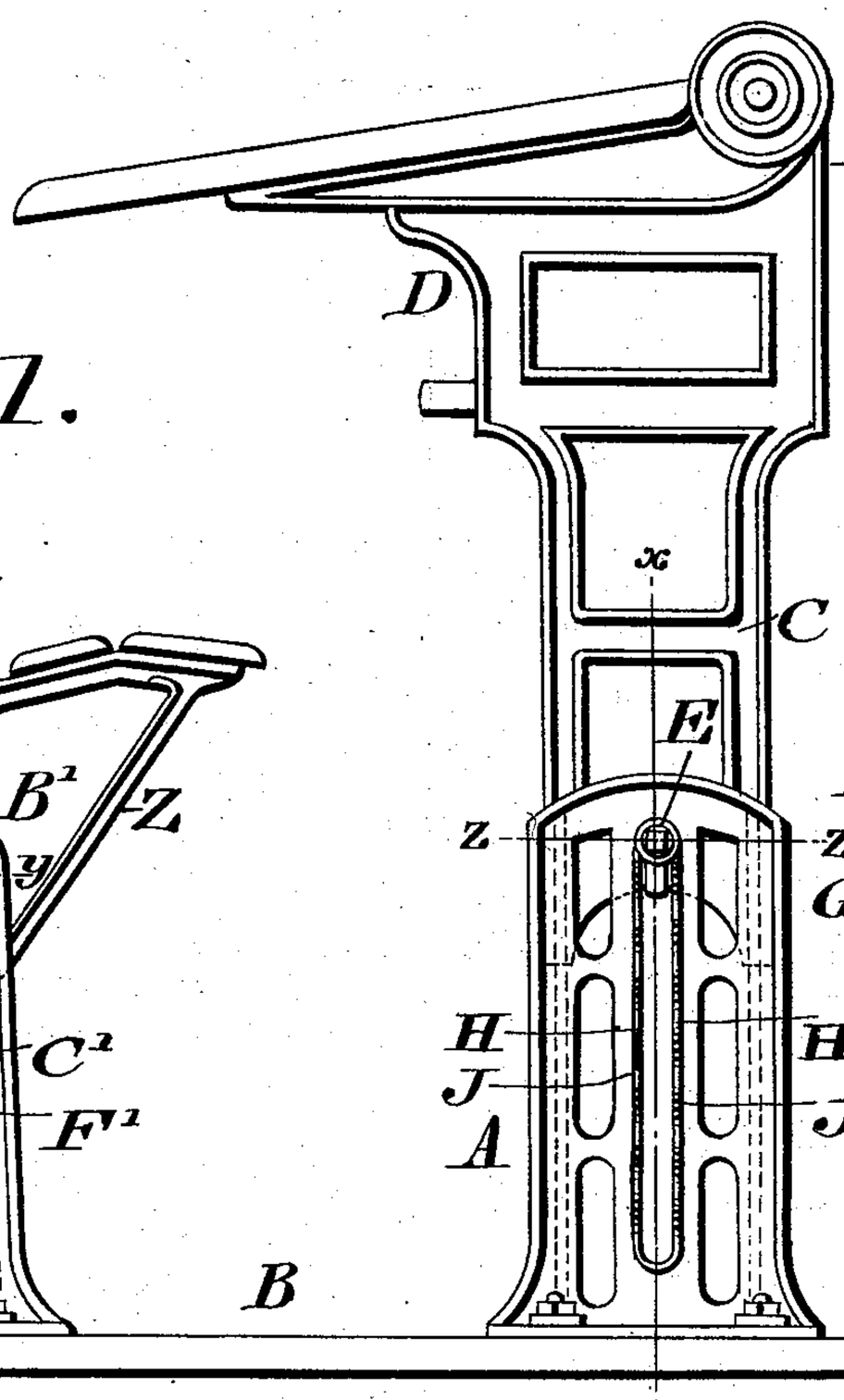

Fig. 2.

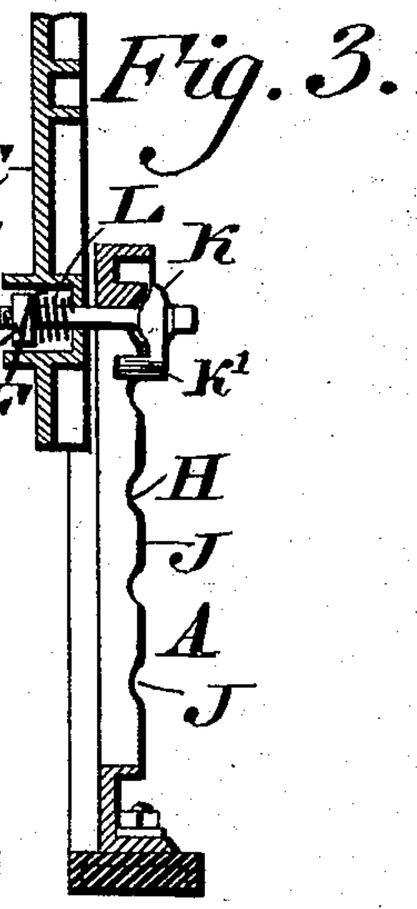

Fig. 3.

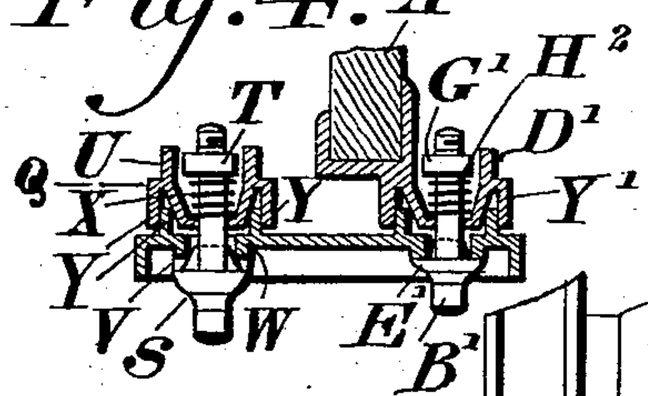

Fig. 4.

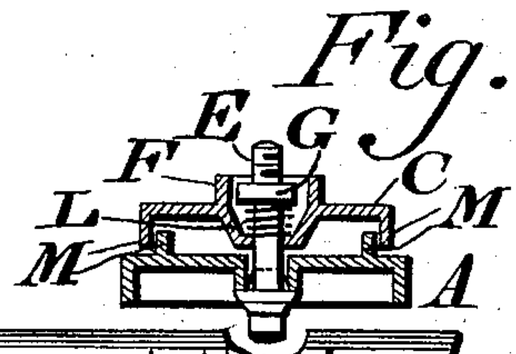

Fig. 5.

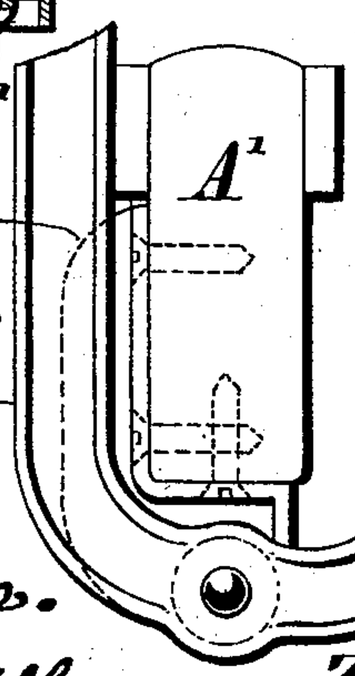

Fig. 6.

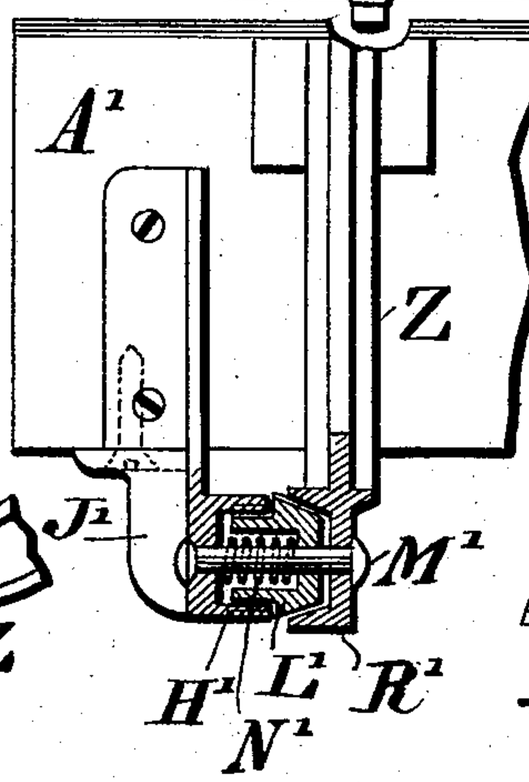

Fig. 7.

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UNITED STATES PATENT OFFICE.

JOSEPH HAUSS, OF FRANKENTHAL, GERMANY.

SCHOOL DESK AND SEAT.

SPECIFICATION forming part of Letters Patent No. 506,496, dated October 10, 1893.

Application filed December 30, 1892. Serial No. 456,751. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HAUSS, a subject of the Emperor of Germany, residing at Frankenthal, Rheinpfalz, Germany, have invented a new and useful Improvement in School Desks and Seats, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in school desks and seats, and consists of the combination of parts hereinafter set forth.

Figure 1 represents a side elevation of a school seat embodying my invention. Fig. 2 represents a side elevation of a school desk embodying my invention. Fig. 3 represents a vertical section on line *x*, *x*, Fig. 2. Fig. 4 represents a horizontal section on line *y*, *y*, Fig. 1. Fig. 5 represents a horizontal section on line *z*, *z*, Fig. 2. Fig. 6 represents a side elevation of portion of the seat, on an enlarged scale. Fig. 7 represents an elevation in partial section.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates standards which are secured to the base or floor B. To the inner sides of said standards are fitted the depending legs C of the desk D.

Passing through slots in the standards A and openings in the legs C, are bolts E, whose threaded ends have fitted on them the nuts G, the latter occupying the sockets F on the inner sides of the legs C, whereby said nuts are shielded from accidental contact and prevented from rotation.

On the walls of the slots of the standards A are flanges H, whose faces are corrugated or serrated as at J, to receive the teeth K on the sides of the bolts E, it being seen that the bolts may be drawn so that the teeth may be disengaged from the corrugations or serrations J, after which the legs C may be raised or lowered to adjust the height of the desk D. The teeth are then fitted in the contiguous corrugations or serrations, and owing to the springs L on the bolts E between the nuts G and the base of the sockets F, are held therein, whereby the desk is firmly secured in adjusted position and prevented from lowering or dropping, owing to the locking action of the teeth K on the standard A. The tendency of the said springs L is to keep at all times said teeth in engagement or interlocked with said corrugations.

M designates flanges on the adjacent sides of the standards A and legs C, the same acting as guides for the legs C in the vertical motions thereof, and also preventing turning of the desk on the standard.

N designates a school seat, P the standards, and Q the back, said seat and back being adjustably mounted on said standards.

Passing through slots R in the standards are bolts S, which also pass through openings in the back Q, and are provided with nuts T, which occupy sockets U in said back, whereby the nuts are protected from accidental contact and also prevented from rotation. On the heads of the bolts are teeth V, which are adapted to enter corrugations or serrations W in the walls of the slots R, and thus lock the back to the standards P. In order to draw said teeth V into the corrugations or serrations W I employ springs X which bear against the base of the sockets U and the nuts T. When the back is adjusted as described, the teeth are held firmly in the corrugations, owing to said springs X, and thus the back retains its position.

In order to guide the back in its movements and to prevent said back from turning on the standards, I employ flanges Y on the adjacent faces of the back and standards, the same being placed side by side, as most clearly shown in Fig. 4, it being noticed that the standard and seat frame or sockets D′ have flanges Y′ for similar purposes.

The seat N is supported on the arms Z which are mounted on the blocks A′, the latter being connected with the standards P by means of bolts B′, which pass through vertical slots C′ in the standards, and through openings in the sockets D′ on the blocks A′, whereby the seat may be vertically adjusted. On the heads of the bolts B′ are teeth E′ which are adapted to engage with serrations F′, on the walls of the slots C′. Nuts G′ are fitted on the bolts B′ and enter the sockets D′, whereby they are protected from rotation and by means of the springs H^2 on said bolts, the teeth are held securely in the serrations so that the seat is held in vertically adjusted position and prevented from lowering. The said springs H^2 are interposed between the

nuts G′ and the bases of the sockets D′ for primarily retaining the teeth E′ in engagement with the serrations F′.

In order to prevent the several bolts from turning, each of the same is provided with a tongue K′, which freely enters the slot of the respective standard, and rises and lowers with the bolt.

The axes of the seat consist of the sockets H′ on the arms J′, the latter being secured to the beam A′, the sockets R′ on the arms Z, the conical socket piece L′ which enters said sockets H′, R′, and the bolt M′ which passes through said sockets and socket piece, by which provision the seat turns easily and noiselessly on the axes thereof.

Interposed between the socket pieces L′ and the bases of the sockets H′ are springs N′ which hold the parts of the axes sufficiently close together as friction joints, and prevent lost motions and rattling of said parts.

In order to adjust the tension of either of the springs L, X, or H^2, their respective bolts may be drawn so that the teeth thereon are free from the corrugations, and the bolts turned so that the nuts thereon are moved in the sockets either to or from the base thereof as desired.

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

1. A school desk having standards, each provided with a slot having its side walls formed with corrugations thereon, legs on said desk having sockets on their inner faces and flanges on their sides fitting flanges on the said standards, bolts passing through openings in said sockets and provided with teeth fitting in said corrugations, nuts on said bolts in said sockets, and springs on said bolts bearing on said nuts and on the base of a socket in which said nut is non-rotatable, said parts being combined substantially as described.

2. A standard with a slot having corrugations on the faces of its side walls, a leg with openings, a bolt passing through said openings and slot and provided with a tongue fitting in said slot, and teeth fitting in said corrugations, and a fastening nut on said bolt, said parts being combined substantially as described.

3. An adjustable desk, seat and back, having slotted standards supporting the same, bolts connecting said desk, seat and back with said standards, serrations on said standards, teeth on said bolts engaging said serrations, and tongues on the bolts freely entering the slots of the standards, the parts named being combined substantially as described.

To the above I have signed my name this 29th day of October, 1892.

JOSEPH HAUSS.

In presence of—
PIT. WEILEY,
FERD. BOPP.