

(No Model.)

F. R. BEAL.
ADJUSTABLE SCHOOL DESK.

No. 586,156.

Patented July 13, 1897

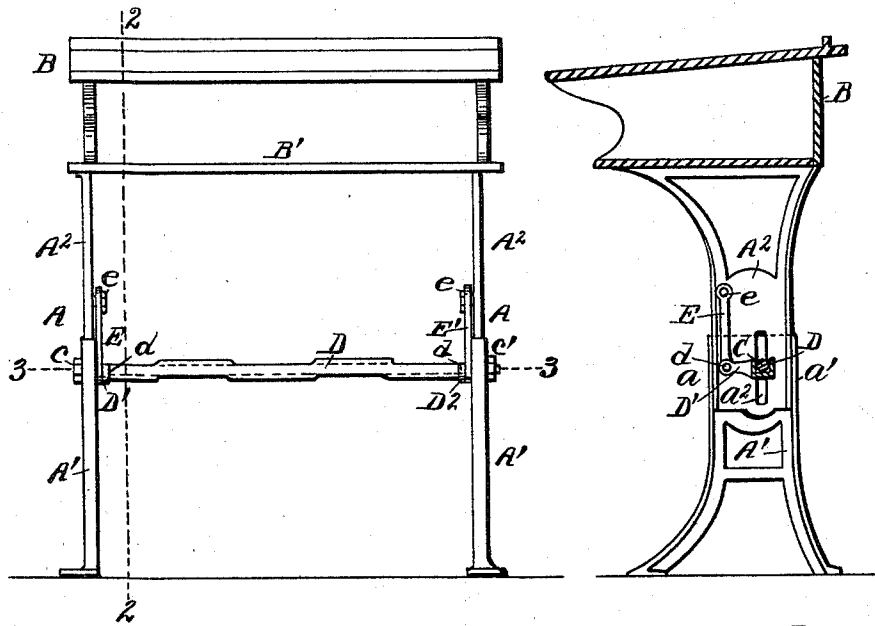
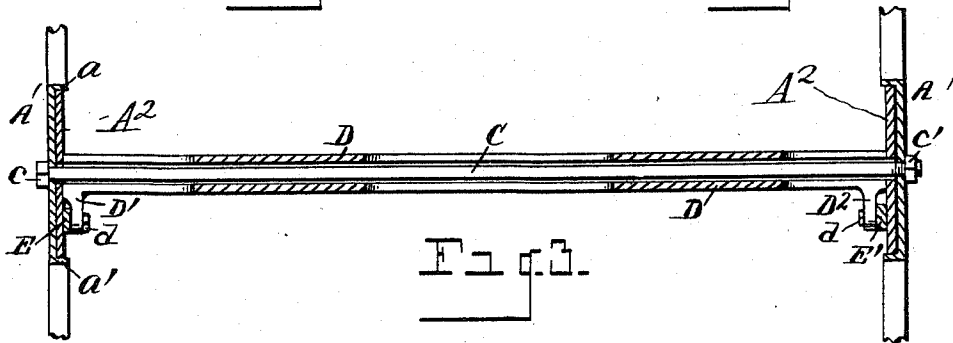


Fig. 1.

Fig. 2.



WITNESSES

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FRANCIS R. BEAL, OF NORTHVILLE, MICHIGAN.

ADJUSTABLE SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 586,156, dated July 13, 1897.

Application filed September 12, 1896. Serial No. 605,567. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS R. BEAL, a citizen of the United States, residing at Northville, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Adjustable School-Desks; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object certain new and useful improvements in a school-desk, and more especially to a vertically-adjustable school-desk of superior simplicity, utility, and convenience of adjustment; and it consists of the construction, combination, and arrangement of devices hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in front elevation. Fig. 2 is a vertical section on the line 2 2, Fig. 1. Fig. 3 is a horizontal section on the line 3 3, Fig. 1.

It is of obvious convenience and utility to have a school-desk vertically adjustable, so as to be raised or lowered to suit different scholars, who may from time to time need to use the desk, and it is the purpose of my invention to provide a desk which may be readily and quickly adjusted to any desired position vertically by a single person and whereby both ends of the desk will be simultaneously adjusted to a uniform height.

I carry out my invention as follows:

In the drawings, A and A² represent the two end frames, each constructed of a lower and an upper section, as indicated at A' A², the parts A' A² having an adjustable engagement the one with the other.

B denotes the top of the desk, and B' a shelf, which constitute, however, no feature of my invention.

The parts A' A² of the end frames or supports are made to slide one upon the other in any desired manner—as, for example, the lower parts A' may be formed with lateral guide-flanges *a* and *a'*, within which flanges the lower end of the corresponding portion A² is located. The upper parts A², at their lower extremities, are each formed with an

elongated slot *a*², through which is passed a rod C, said rod being also passed through the upper ends of the lower portions A' of the end frames. The rod C may be constructed with a head *c* at one end thereof bearing upon the outer face of the upper extremity of the portion A' of the adjacent end frame. The opposite end of said rod is threaded and provided with a nut *c'*, which may be forced against the outer face of the portion A' of the opposite end frame.

D is a hollow shaft sleeved upon the rod C, said hollow shaft being provided with crank-arms D' and D² at the extremities thereof.

E and E' denote connecting-bars, each having a jointed connection at one extremity with the portion A² of the adjacent end frame, as indicated at *e*. The lower extremities of the bars E E' are connected with the corresponding crank-arms D' D², as indicated at *d*. The hollow shaft D is made of any suitable form to permit the ready engagement of any ordinary wrench therewith. It will be perceived that when the nut *c'* is tightened up the two adjacent extremities of each of the end frames will be clamped together, so as to effectually hold the two portions A' A² of each of the end frames in any given position of adjustment.

The operation of the device will be readily understood. When it is desired to readjust the height of the desk, the single person may apply a wrench with one hand to the nut *c'*. With the other hand he applies another wrench to the hollow shaft D. Then by loosening up the nut with the one hand he may, by the wrench in the other hand, give a partial rotation to the shaft D, so as to throw its crank-arms upward or downward, as may be desired, thereby raising or lowering the portions A² of each of the end frames to required position. The nut is then tightened up and the desk is held in the position desired. It will be obvious, as above mentioned, that both ends of the desk will be simultaneously adjusted, and the whole operation may be done, as indicated, by a single person quickly and in a very simple manner.

Heretofore as adjustable desks have commonly been constructed it has generally required one person to lift the top of the desk by hand or to depress it to required position,

another person being required to loosen and to set the devices which hold the adjustable parts of the desk in place. The aim of my invention is to overcome this cumbrous and arduous difficulty and to provide means for raising and lowering the desk in so easy and convenient a manner that any one person can readily accomplish it.

What I claim as my invention is—

10 1. An adjustable school-desk, having its end frames each constructed in two parts adjustable the one upon the other, a rod connecting similar parts of the two end frames, a hollow shaft sleeved upon said rod and provided with crank-arms at its extremities, and
15 connecting-bars having a jointed engagement with said crank-arms, and with the other similar portions of the end frames, said rod provided with a nut upon one end thereof, substantially as set forth.

20 2. An adjustable school-desk, having its end frames each constructed in two parts adjustable the one upon the other, a rod connecting similar parts of the two end frames, a hollow shaft sleeved upon said rod and provided with crank-arms at its extremities, and
25 connecting-bars having a jointed engagement with said crank-arms, and with the other similar portions of the end frames, said rod provided with a nut upon one end thereof, said

hollow shaft extending from one end frame to the other, whereby both end frames may be simultaneously adjusted by a partial rotation of the said shaft, substantially as set forth.

3. An adjustable desk, having two end frames each made of two parts having a sliding engagement the one with the other, a transverse rod connecting similar portions of each of the two end frames, a hollow shaft upon said rod provided with crank-arms at its extremities, and connecting-rods having a jointed engagement with said crank-arms and with the other similar portions of the end frames, said rod provided with a head upon one end and with a nut upon the opposite end thereof, one of said adjustable parts of the end frames, when the nut is tightened, being clamped against the sleeve, and the other of said adjustable parts clamped against the adjacent parts of the end frames to hold the adjustable parts of the end frames firmly in desired position, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

FRANCIS R. BEAL.

Witnesses:

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HETTIE JOHNSON.