April 22 , 1924. 1,491,685

H. C. EICHER ET AL

SCHOOL FURNITURE

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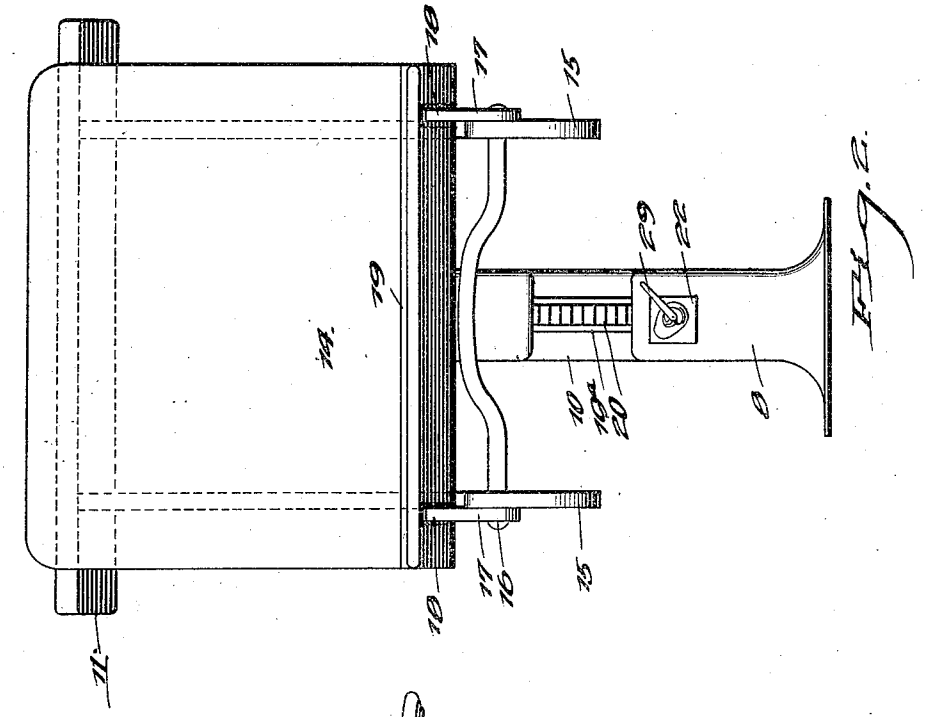

Fig. 2.

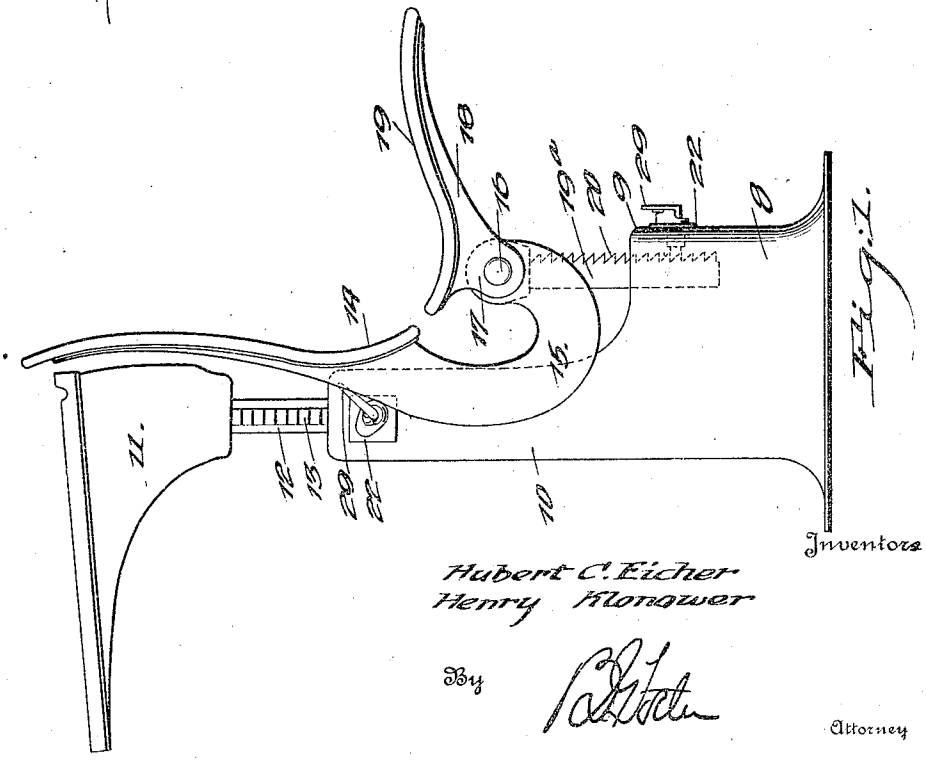

Fig. 1.

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Fig. 3.

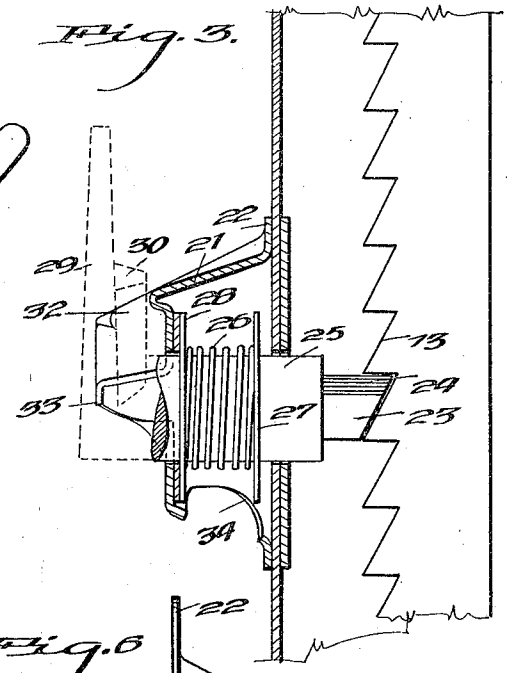

Fig. 4.

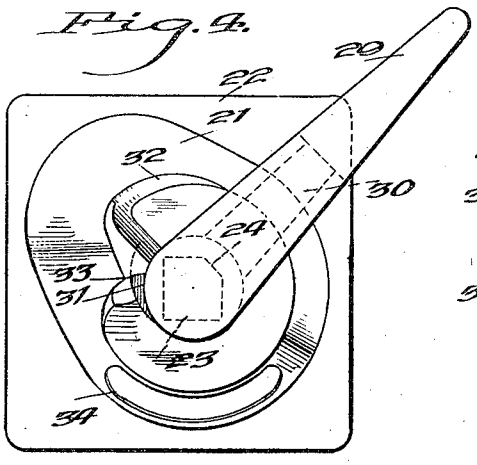

Fig. 6

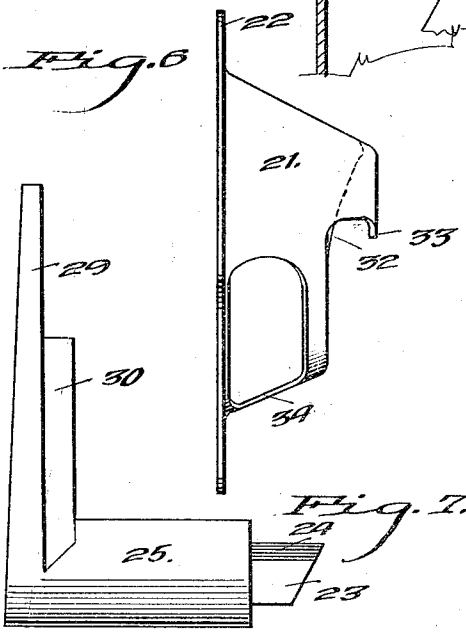

Fig. 7.

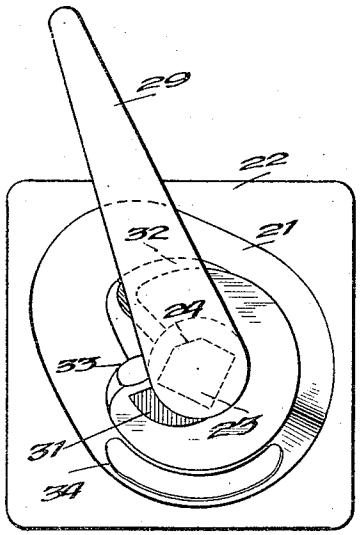

Fig. 5.

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UNITED STATES PATENT OFFICE.

HUBERT C. EICHER AND HENRY KLONOWER, OF HARRISBURG, PENNSYLVANIA.

SCHOOL FURNITURE.

Application filed May 5, 1923. Serial No. 636,849.

To all whom it may concern:

Be it known that we, HUBERT C. EICHER and HENRY KLONOWER, citizens of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in School Furniture, of which the following is a specification.

The present invention relates to school furniture, and particularly combination desks and seats mounted on a single base, and independently adjustable.

The object is to provide a simple structure of a practical character that will permit the individual adjustment of the desk or seat member, the latter being capable of being elevated by the pupil and automatically locked at the desired elevation.

A further object is to provide means whereby when the adjustment has been secured, the seat member can be positively locked against accidental change.

In the accompanying drawings:—

Figure 1 is a side elevation of a combined seat and desk with novel holding means,

Figure 2 is a front elevation of the same,

Figure 3 is a detail sectional view through the locking means,

Figure 4 is a rear elevation of the same, showing the holding means positively locked,

Figure 5 is a view similar to Figure 4, but showing the holding means released,

Figure 6 is a side elevation of the mounting, and

Figure 7 is a side elevation of the pawl member.

In the embodiment disclosed a single base 8 is provided for a seat and desk, said base having a short portion 9 and an upward extension 10 in rear of said portion 9. The desk is shown at 11 and is provided with a standard 12 vertically slidable in the portion 10. This standard is provided on one side with a rack 13.

The seat comprises a back 14 mounted on spaced brackets 15 that have their free ends connected by a supporting and pivot rod 16. On said rod are pivoted the ears 17 of arms 18 carrying the seat member 19. The rod 16 is centrally fixed to a standard 19ª that is vertically slidable in the short portion 9 of the base 8, and said standard has a rack 20. Cooperating with the respective racks 13 and 20 are holding pawls, and as these are duplicates, a description of one will be a description of both. Therefore a single disclosure thereof is made in Figures 3–7 inclusive.

Secured to the exterior of the base is a mounting shell 21, preferably stamped from sheet metal and tapering outwardly, said shell having a flange 22 suitably secured to the base. In this shell is mounted a holding pawl 23 that is adapted to interlock with the teeth of the rack 13 or 20 in a manner readily understood. This pawl is capable of both reciprocation and rotation, and preferably has one corner beveled off, as shown at 24.

It is carried by a cylindrical body portion 25 surrounded by a coiled spring 26 that serves to urge the pawl into engagement with the rack teeth. This spring bears against a washer 27 carried by the body 25 and against the washer 28 located against the inner face of the mounting shell. The outer end of the pawl member or body is provided with an angular crank handle 29 having a bearing lug 30 on its inner side and also carrying a locking projection 31. The outer end of the mounting shell is formed with a cam surface 32 against which the lug 30 is adapted to ride, and said outer end is also provided with an overhanging hook 33 located at the lower end of the cam surface 32. The shell may also have in its lower side an opening 34 which gives access to the interior and also affords a means of exit for dust and the like that might otherwise accumulate in said shell.

With this construction, when the handle is turned to the position shown in Figure 5, the lug 31 is disengaged and the pawl member can reciprocate freely. It is, however, urged into engagement with the rack by the spring 26 as will be evident by reference to Figure 3. The member carried by the standard—either the desk or the seat—can therefore be readily adjusted merely by pulling it upward, the pawl riding over the inclined faces of the rack teeth and engaging under the sharp shoulders thereof, as will be evident. A pupil therefore may, for example, sit on the seat and said seat can be adjusted to his size. When the desired adjustment has been made the handle is turned to the position illustrated in Figure 4, whereupon the lug 31 will pass behind the hook 33 and thus positively lock the pawl against outward movement, fixing the member against accidental displacement. If the handle is turned to the other

extreme the pawl is not only unlocked but the lug 30 riding up the incline of the cam surface 32, will cause the pawl to be positively disengaged from the rack, thus permitting the free downward movement of the standard and the member carried by it.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is:—

1. School furniture, including a base, a member to be adjusted having a standard slidable in the base and provided with a rack, a pawl that movably engages the rack and permits the upward movement of the standard while preventing its downward movement, said pawl being also rotatable and means operative on the rotation of the pawl for locking the pawl against movement and in engagement with the rack to positively lock the standard against movement in either direction.

2. School furniture, including a base, a member to be adjusted having a standard slidable in the base and provided with a rack, a spring-pressed reciprocatory pawl mounted on the standard and capable of rotary movement, said pawl engaging the rack and by its reciprocation permitting the upward movement of the standard while preventing its downward movement, a spring urging the pawl into engagement with the rack, and means operative on the rotation of the pawl to lock said pawl against movement and in engagement with the rack to positively lock the standard against movement in either direction.

3. School furniture, including a base and a member to be adjusted having a standard slidably mounted in the base and provided with a rack, a reciprocatory and rotary pawl mounted in the base and engaging the rack, a handle for the pawl, and a mounting for said pawl having an overhanging hook behind which the handle engages to lock the pawl in engagement with the rack.

4. School furniture, including a base and a member to be adjusted having a standard slidably mounted in the base and provided with a rack, a reciprocatory and rotary pawl mounted in the base and engaging the rack, a handle for the pawl, and a mounting for said pawl having a cam surface against which the handle rides to withdraw the pawl from engagement with the rack, said mounting also having an overhanging hook behind which the handle engages to lock the pawl in engagement with the rack.

In testimony whereof, we affix our signatures in the presence of two witnesses.

HUBERT C. EICHER.
HENRY KLONOWER.

Witnesses:
J. GEORGE BECHT,
U. G. FRY.