

Nov. 17, 1953

E. J. KUMP, JR

2,659,649

SCHOOL DESK

Filed May 2, 1949

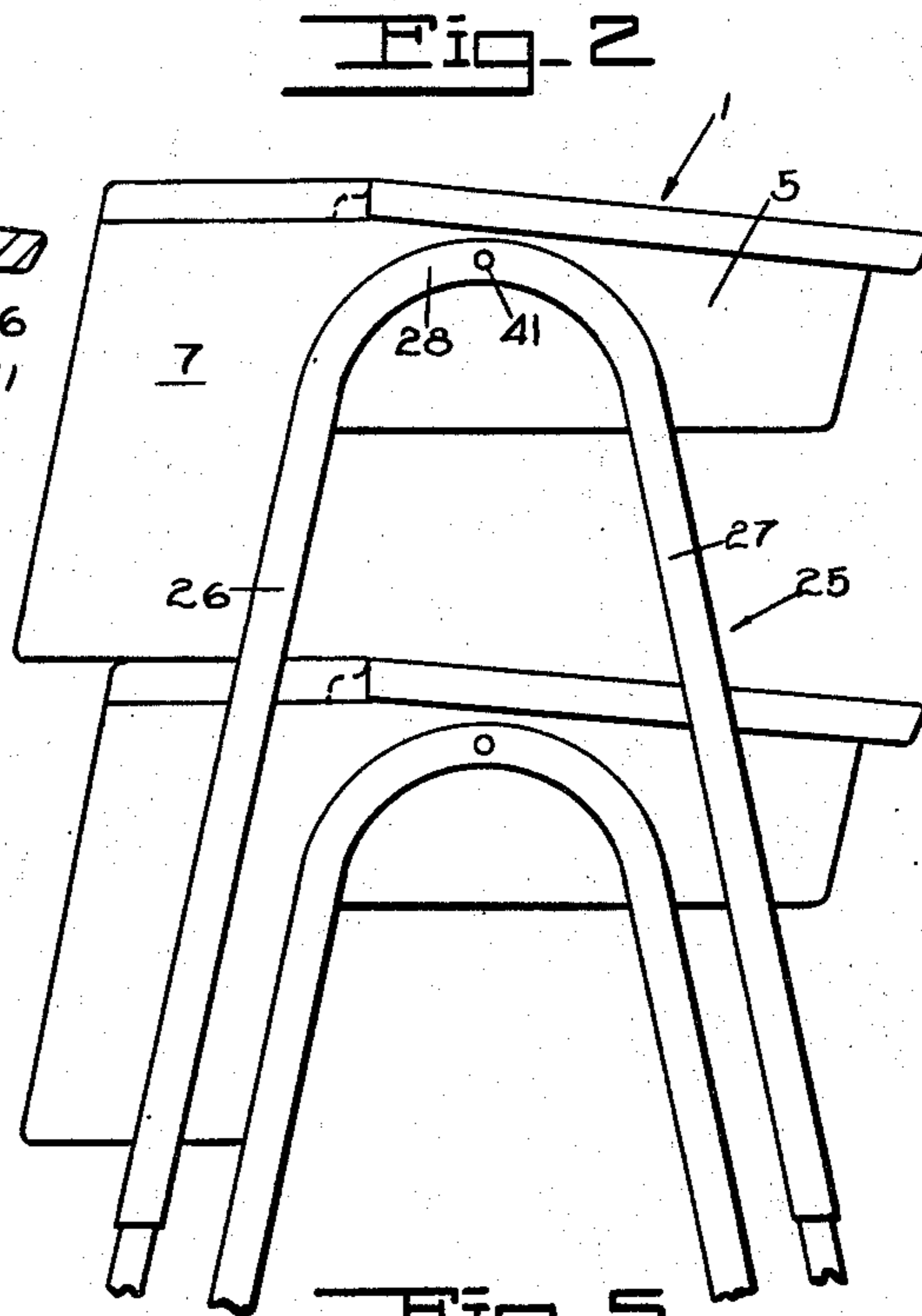
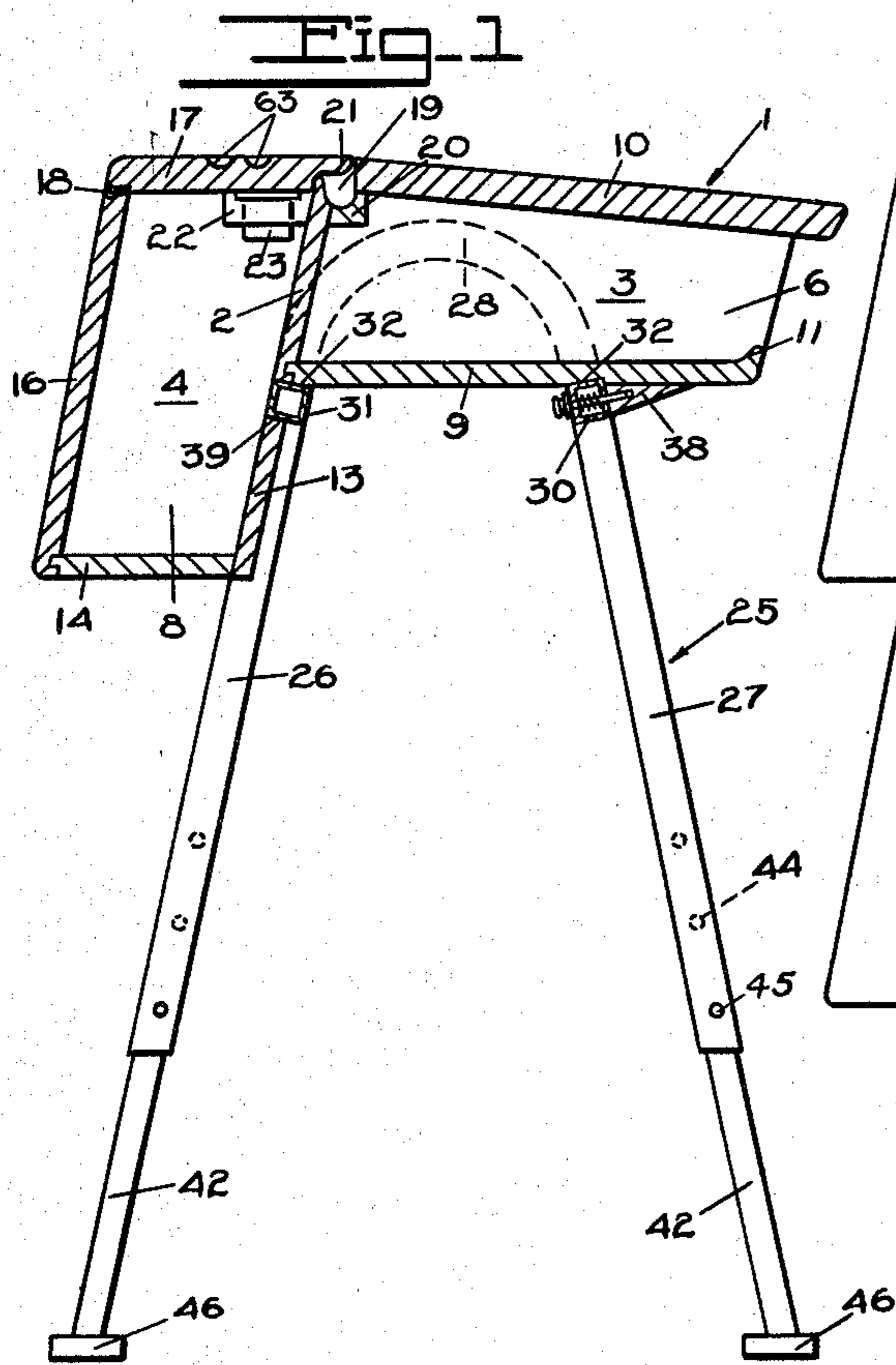


Fig-5

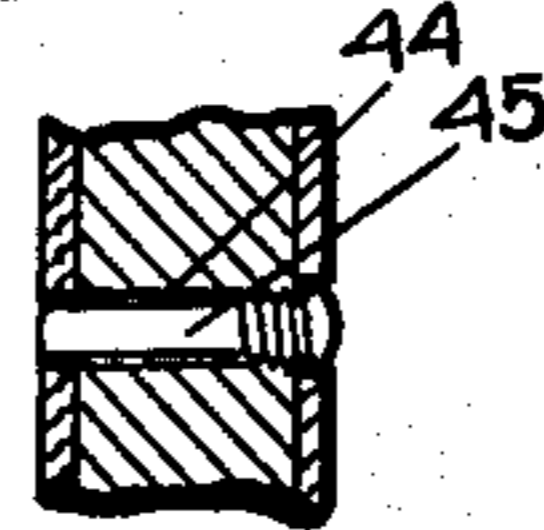


Fig-3

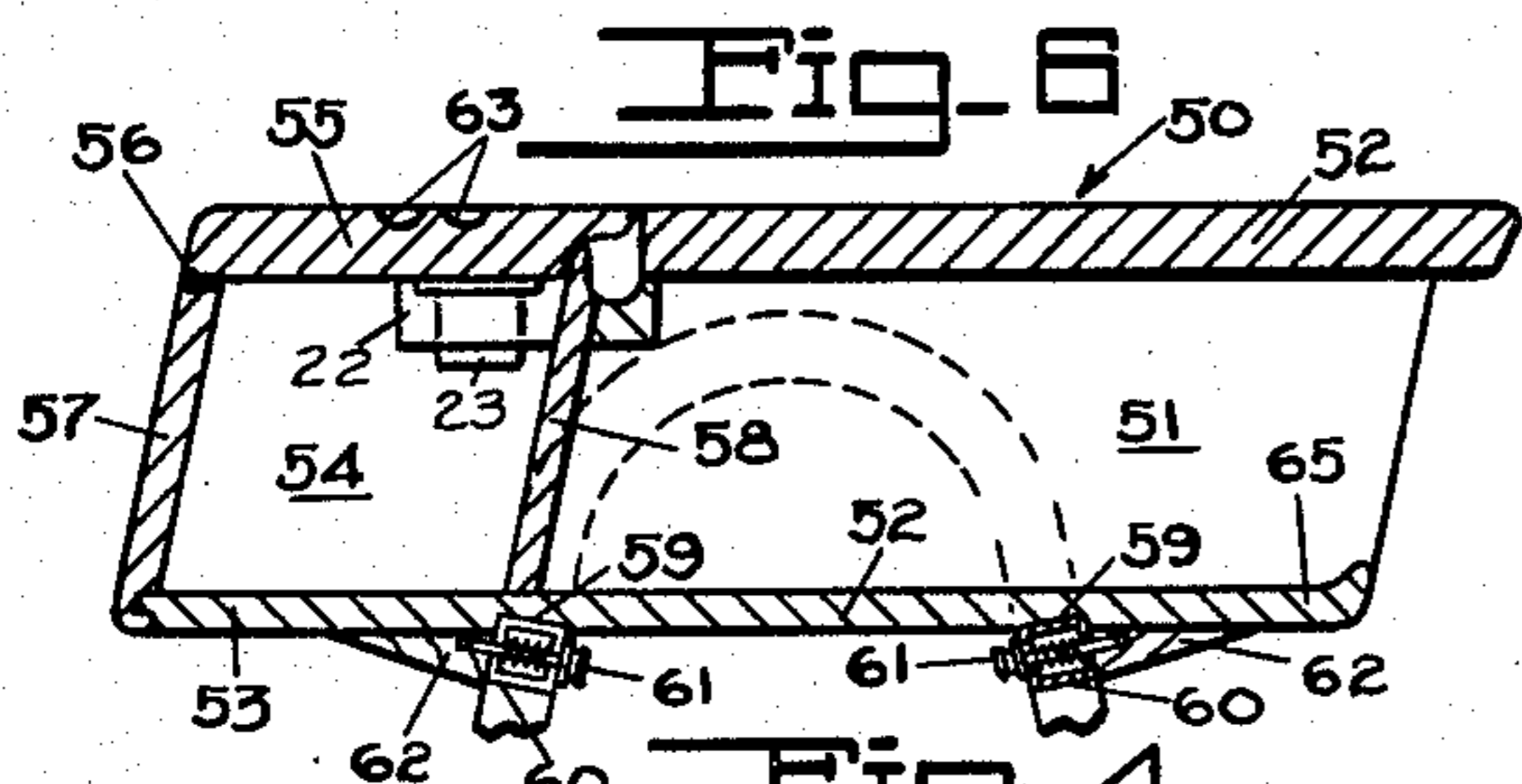
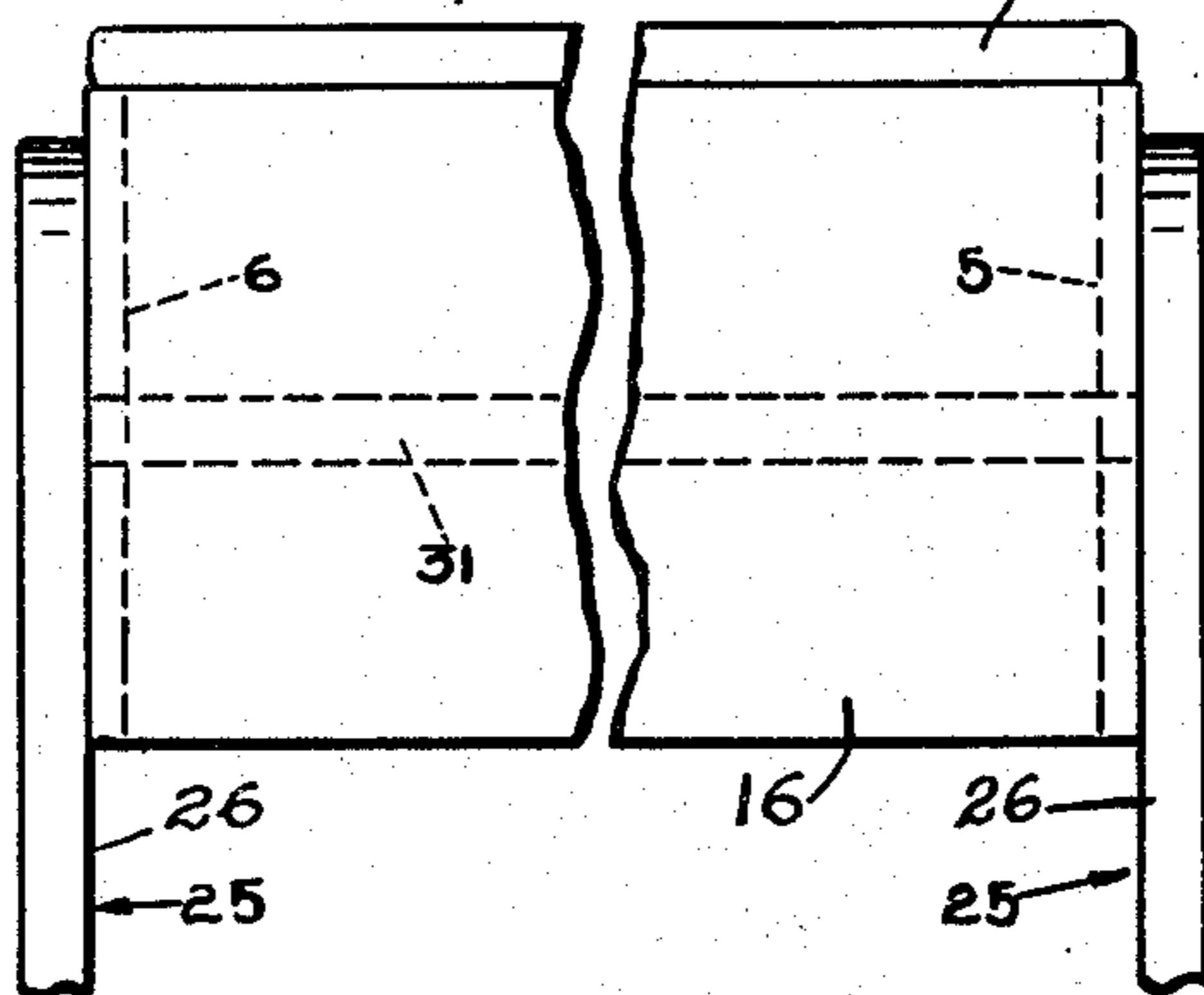
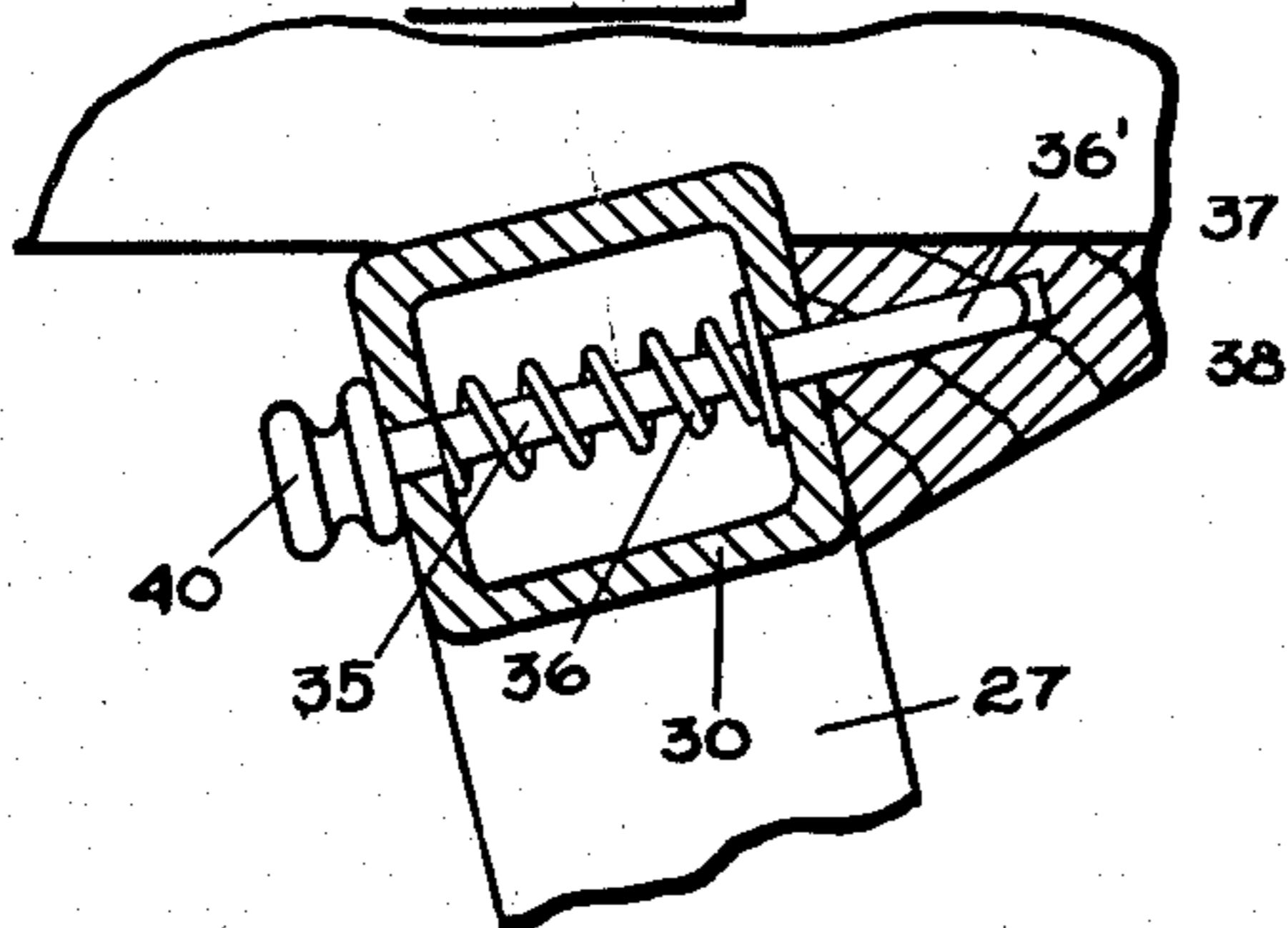


Fig-4



INVENTOR.
ERNEST J. KUMP JR.

BY
Boyer, Mohler & Beckley.
ATTORNEYS

UNITED STATES PATENT OFFICE

2,659,649

SCHOOL DESK

Ernest J. Kump, Jr., San Francisco, Calif.

Application May 2, 1949, Serial No. 90,866

12 Claims. (Cl. 312-249)

1

This invention relates generally to school furniture and more specifically to school desks.

At the present time the trend is to provide school furniture that is readily movable about the school room or from one room to another with each pupil having a desk and seat independently of the others and which desk is instantly movable to any desired location independently of the other desks and seats. Such a structure also facilitates cleaning the school rooms, inasmuch as the desks can be moved about the room as desired.

Heretofore, most of the efforts directed toward providing structure of the above character, have been relatively crude, and the desks have been so designed that their assembly is a factory job instead of providing desks that have been so designed that they can be compactly packaged and then assembled at the final site or at least in the school shop, and without requiring skilled labor.

Also, most of the school desks heretofore designed are relatively heavy, therefore difficult to move around, and the means for securing them in assembled relationship is complicated and readily becomes loosened. Furthermore, at least some of the parts are usually of cast metal that is easily broken, and in others there are pedestals that interfere with the comfort of the pupils and that provide relatively insecure supports at the best, unless so massive as to be impractical and highly cumbersome.

Heretofore, no desks of which I am aware provide structure in which the desks may be nested one above the other, without disturbing the contents of the desks. In this connection, the term "desks" as just used refers to the desks for pupils and each of which has a receptacle for books and tablets and the like below which receptacle the legs of the pupil extend when the pupil is seated. I do not refer to the storage cabinets or desks of the office type.

One of the objects of this invention is the provision of a very simple and economical made school desk that is adapted to be easily moved from place to place, and that is very stable and solid, yet relatively light and easy to carry.

Another object of the invention is the provision of a school desk that has several compartments for books and the like, one being a forward upwardly opening compartment for holding such books as are not in immediate use, and the other being a laterally opening compartment having a working top, and which desk is adapted to be supported on the floor by simple, strong means that is easily assembled and by unskilled labor

2

at the site where the desk is to be used or wherever desired, and which means is easily and economically made.

A still further object of the invention is the provision of school desks that can easily be nested one over the other without disturbing the contents, and which desk includes a laterally outwardly opening compartment having a bottom wall on which school books, and the like are supported, and which bottom wall is provided with means for preventing the articles supported thereon from sliding out of the compartment when the desk is shifted from place to place.

An additional object of the invention is the provision of a school desk having two pairs of generally U-shaped, tubular, metal members providing the four legs of the desk, and which members are connected adjacent their upper ends by means on which a receptacle for books and the like are adapted to be supported with such receptacle between said upper ends.

Another object of the invention is the provision of simple, easily adjustable means for varying the height of the desk, and a still further object is the provision of a simple desk structure that may easily and quickly be assembled and disassembled without requiring special or unusual tools.

Other objects and advantages will appear in the description and in the drawings.

In the drawings,

Fig. 1 is a vertical sectional view taken centrally through the desk.

Fig. 2 is a side elevational view of the upper portions of several desks in nested relationship. The lower ends of the legs are broken off in this view.

Fig. 3 is a fragmentary front elevational view of the desk of Fig. 1, centrally broken out to accommodate the view to the sheet. The lower ends of the legs are broken away.

Fig. 4 is an enlarged fragmentary sectional view more clearly showing one of the elements for releasably securing the top portion of the desk to the legs.

Fig. 5 is a sectional view, slightly reduced relative to the scale of Fig. 4, showing the preferred means for holding the leg extensions in place.

Fig. 6 is a vertical sectional view similar to that of Fig. 1 but with the legs broken away, showing a structure that is slightly modified from that of Fig. 1.

In detail, the invention herein illustrated comprises a receptacle for books and the like, generally designated 1, which is divided by a vertically extending wall 2 into a first compartment 3 and a

3

second compartment 4. There are two opposed side walls 5, 6 to compartment 3 that may be extended at 7, 8 to provide two corresponding side walls for compartment 4.

Compartment 3 has a bottom wall 9 and a top wall 10, with the top wall slightly slanted downwardly from the upper edge of the dividing wall 2 providing a working surface.

The rear side of compartment 3, which is the side that is adapted to be adjacent a pupil when the latter is seated at the desk, opens laterally and rearwardly, and the marginal portion of the bottom wall 9 along said open side is turned up slightly, as at 11 to prevent articles on bottom 9 from sliding out of said open side when the desk is shifted about, and the free edges of said marginal portion are rounded. Also the juncture between said marginal portion and the bottom wall is preferably curved.

The dividing wall 2 at the forward end of compartment 3 extends downwardly past the forward edge of bottom wall 9 a substantial distance, and at a slight forward incline from its top to its bottom edge. This downward extension is indicated at 13.

The compartment 4 has a bottom wall 14 at the lower end of wall 13 and the side walls 7, 8 extend to said bottom wall. A forward wall 16 is preferably parallel with the dividing wall 2 and spaced forwardly therefrom, it being understood that wall 2 has the same incline from top to bottom as the extension 13.

The upper end of compartment 4 opens upwardly so that books or the like may be inserted generally vertically therein, and a cover 17 is hingedly secured at 18 to the upper edge of the front wall 16 for closing the upper end of said compartment 4.

An upwardly opening horizontally extending recess 19 partially formed in the upper edge of wall 2 and in a horizontal strip 20 in compartment 3 along said upper edge for holding pencils, pens and the like, and a lip 21 along the rear edge of closure or cover 17 is adapted to extend over said recess when the cover is closed, and when the pencils and pens are in said recess. The ends of said recess are adjacent side walls 5, 6 and are closed by the latter. Thus, when the desks are shifted about, the pencils etc. are securely held in them from accidentally falling out.

At any desired point in compartment 4 at its upper end there may be a block 22 apertured for holding an ink well 23 therein. The cover 17 preferably lies close across the top of said ink well and covers the same when the cover is in closed position. In Fig. 1 the block 22 is in a right hand corner alongside the dividing wall 2 and alongside side wall 8.

The means for supporting the receptacle 1 comprises a pair of inverted generally U-shaped, tubular members each being generally designated 25. These members are spaced apart the distance between the oppositely outwardly facing surfaces of the lateral sides 5, 6 of compartment 3, and they are preferably identical in contour and size, each being formed from a length of square metal tubing, preferably such as aluminum or an aluminum alloy.

By the above structure, four legs are provided, there being a pair of front legs 26, these being one from each U-shaped member, and a pair of rear legs 27, which are the other legs of said members. The word "rear" refers to the legs nearest the side of the desk at which the pupil is

4

to sit, and the word "front" refers to the legs that are nearest compartment 4 or that are most remote from the side at which the pupil would be seated.

Preferably the legs 26, 27 extend divergently downwardly, and a curved inverted U-bend 28 connects them at their upper ends. The degree of inclination of legs 26 is the same as the inclination of the dividing wall 2.

A rear cross bar 30 connects legs 27 adjacent their upper ends, but spaced from the top of bend 28 and a similar front cross bar 31 connects the upper ends of legs 26 at the same level.

These cross bars are preferably of the same material as the legs 26, 27 and of the same contour, but are slightly tilted about their longitudinal axes so that one of their corners is the uppermost part of each bar.

Bottom 9 is recessed at 32 in its under side to receive these corners, and the bars are so spaced below the uppermost sides of bends 28 that the said sides will be almost even with the top 10 when the bottom 9 is supported on said bars with the latter in recesses 32. The recesses will, of themselves, tend to hold the receptacle 1 from shifting horizontally in a plane parallel with those in which the members 25 are positioned.

The tubes from which the members 25 are formed each have one of their flat sides at their upper ends substantially against the outer surface of one of the side walls 5, 6, thus the compartment will tend to be held against shifting transversely of the members 25, and at the same time the receptacle will function as a brace for the legs since the latter cannot sway transversely of the planes in which the members 25 are respectively positioned when the receptacle is between their upper ends.

Supported on cross bar 30 is a spring urged pin 35 that slidably extends through said cross bar. A spring 36 around said pin functions to yieldably urge the pin longitudinally thereof for releasably holding one end 36' thereof in a recess 37 formed in a block 38 that is secured to bottom 9 of receptacle 1. This pin extends generally horizontally, hence when it is in position with the end 36' in recess 37 (Fig. 4) the receptacle cannot be lifted off the cross bar 30.

The dividing wall 2 is formed with a horizontally extending recess or slot 39 in which cross bar 31 is adapted to extend the rear edges of the downward extensions 7, 8 of the side walls being recessed to receive said cross bar adjacent the ends of the latter. This structure prevents the receptacle from being lifted from the cross bar 31 until the pin 35 is withdrawn from the recess 37.

The pin 35 has a head 40 on the same for grasping by the fingers to release the same from recess 37.

If desired, the U-bends 28 may be apertured transversely for screws 41, but usually these are not essential, particularly where the receptacle snugly fits between said bends.

It is also desirable that the desk be adjustable to different heights, and in the present instance the means for accomplishing this result comprises the provision of extension legs 42 having an external cross sectional contour the same as the inside cross sectional contour of legs 26, 27. These extensions telescopically fit within the lower ends of legs 26, 27 and are transversely apertured at 44 for a pin 45 (Fig. 5) that may be threaded adjacent its head for threaded engagement with a threaded section of each opening

5

44. These may be "Phillips" screws so as to prevent unauthorized tampering therewith by the pupils.

The desired adjustment may be had by removing the screw in each leg and sliding the extension to the desired height; then replacing the screw in the new opening.

The lower end of each extension 42 is provided with a rubber foot 46 to prevent marring the floor as well as providing a friction surface, and cushion.

In the desk shown in Fig. 6, the receptacle, generally designated 50, has a rear compartment 51 below top 52, and this compartment is practically the same as compartment 3, except that the top is shown as being level. Obviously, said top could be inclined the same as top 10.

In the invention as shown in Fig. 6, the bottom 65 of compartment 51 is continued forwardly as at 53 to form the bottom of the forward compartment 54. Thus, the vertical depth of compartment 54 is not as great as that of compartment 4.

The cover of compartment 54, which is indicated at 55, is hinged at 56 to the front wall 57 of said compartment.

A dividing wall 58 is the partition between compartments 51 and 54.

Recesses 59 in the bottom wall 52 receive the cross bars 60 of the inverted U-shaped members. These members and cross bars are identical with those already described, except that both are provided with the spring urged pins 61 and a block 62 is recessed the same as block 38 of Fig. 1 to receive the pins.

The tops 17 (Fig. 1) and 55 (Fig. 6) may be formed with upwardly opening grooves 63 for holding pens or pencils.

The desks of both forms of the invention may be stacked in the manner shown in Fig. 2. The invention as shown in Fig. 6 permits greater ease in stacking, and more desks can be stacked. However, the capacity of the desk of Fig. 6 is less in that it will not take as large books as the form shown in Fig. 1 and at the same time permit the top 55 to close. This is unimportant in those classes where smaller books are used.

The desks of either form are quite light in weight, yet are very rugged and are more durable than the conventional desks that employ many bolts or screws to hold them together.

With the present invention, no screws are required in most instances, and a maximum of only several are used in those instances where they may be desired. No great amount of skill is required in setting up the desks, hence they can be shipped directly to the site, disassembled and quickly assembled on said site by such labor as may be available.

I claim:

1. A school desk comprising a receptacle for school books and the like having a top provided with a working surface, a bottom, and a pair of opposed vertical side walls, a generally vertically extending dividing wall extending between said opposed side walls dividing said receptacle into a first compartment and a second compartment, legs secured to said receptacle for supporting the same above the floor with said working surface generally horizontal, the lateral side of said first compartment opposite said dividing wall being open for lateral insertion of books and the like into the same, an end wall at the side of said compartment opposite said lateral side of said first compartment defining the lateral side of said second compartment opposite said dividing

6

wall, a closure over said second compartment hinged to the upper portion of said end wall along one edge thereof for swinging upwardly to a position uncovering said second compartment, said top and said closure being in substantially meeting relation at about the upper edge of said dividing wall, a ledge along said last mentioned upper edge having an upwardly directed recess formed therein for pencils and the like, said recess being below said cover when the latter is in a position closing the upper side of said second compartment and being exposed for access thereto when said closure is swung upwardly to open position.

2. A school desk comprising a receptacle for school books and the like having a top providing a working surface, a bottom, and a pair of opposed vertical side walls, a generally vertically extending dividing wall extending between said opposed side walls dividing said receptacle into a first compartment and a second compartment, a pair of similar inverted, generally U-shaped members in opposed relationship disposed at their upper ends alongside the oppositely outwardly facing surfaces of said side walls providing means for supporting said receptacle on the floor, means for securing said receptacle to said members, the lateral side of said first compartment opposite said dividing wall being open for lateral insertion of books and the like into the same, and the upper side of said second compartment being open for vertical insertion of books into the same, a cover for the upper side of said second compartment supported for movement from a closed position substantially even with said top to open position substantially wholly uncovering the upper side of said second compartment and vice versa, said second compartment including a generally vertically extending side wall in spaced opposed relation to said dividing wall, and said cover being hingedly secured thereto for said movement.

3. A school desk comprising a receptacle for school books and the like having a top providing a working surface, a bottom, and a pair of opposed vertical side walls, a generally vertically extending dividing wall extending between said opposed side walls dividing said receptacle into a first compartment and a second compartment, a pair of similar inverted, generally U-shaped members in opposed relationship disposed at their upper ends alongside the oppositely outwardly facing surfaces of said side walls providing means for supporting said receptacle on the floor, means for securing said receptacle to said members, the lateral side of said first compartment opposite said dividing wall being open for lateral insertion of books and the like into the same, and the upper side of said second compartment being open for vertical insertion of books into the same, said upper ends of said members being positioned alongside the portions of said lateral side walls that define two of the opposed sides of said first compartment, and the means for securing said receptacle to said members including a cross bar connecting said members at a point spaced below their uppermost ends and extending below said bottom wall.

4. A school desk comprising a receptacle for school books and the like having a top providing a working surface, a bottom, and a pair of opposed vertical side walls, a generally vertically extending dividing wall extending between said opposed side walls dividing said receptacle into a first compartment and a second compartment, a

7

pair of similar, inverted, generally U-shaped members in opposed relationship disposed at their upper ends alongside the oppositely outwardly facing surfaces of said side walls providing means for supporting said receptacle on the floor, means for securing said receptacle to said members, the lateral side of said first compartment opposite said dividing wall being open for lateral insertion of books and the like into the same and the upper side of said second compartment being open for vertical insertion of books into the same, one of the downwardly extending sides of each of said members adjacent their upper ends being positioned alongside the lateral end edges of said dividing wall and the other downwardly extending sides of said members adjacent their upper ends extending alongside the portions of said lateral side walls that define two of the opposed sides of said first compartment at points adjacent the open side of said first compartment.

5. A school desk comprising a receptacle for school books and the like having a top and providing a working surface, a bottom, and a pair of opposed vertical side walls, a generally vertically extending dividing wall extending between said opposed side walls dividing said receptacle into a first compartment and a second compartment, a pair of similar inverted, generally U-shaped members in opposed relationship disposed at their upper ends alongside the oppositely outwardly facing surfaces of said side walls providing means for supporting said receptacle on the floor, means for securing said receptacle to said members, the lateral side of said first compartment opposite said dividing wall being open for lateral insertion of books and the like into the same, and the upper side of said second compartment being open for vertical insertion of books into the same, one of the downwardly extending sides of each of said members adjacent their upper ends being positioned alongside the lateral end edges of said dividing wall and the other downwardly extending sides of said members adjacent their upper ends extending alongside the portions of said lateral side walls that define two of the opposed sides of said first compartment at points adjacent the open side of said first compartment, a pair of cross bars connecting said members, one cross bar extending below said bottom wall and between said first mentioned downwardly extending sides of said members, and the other cross bar extending below said bottom wall and between said other downwardly extending sides of said members, said bottom wall being supported on said pair of members.

6. A school desk comprising a first compartment and a second compartment, a single generally vertically extending dividing wall common to both compartments defining one of the lateral sides of each, a first bottom wall, a first top wall and a first pair of opposed vertically extending walls extending to one side of said dividing wall defining the top, bottom, and two of the lateral sides of said first compartment, said dividing wall projecting downwardly a substantial distance below said bottom wall, a second bottom wall extending horizontally from the lower edge of the downwardly projecting portion of said dividing wall and to the side of the dividing wall that is opposite said first bottom wall, a second pair of opposed vertically extending walls coplanar with said first pair extending upwardly from said second bottom wall defining two of the lateral sides of said second compartment, a

8

vertically extending wall in spaced opposed relation to said dividing wall and extending upwardly from said second bottom wall between two of the lateral edges of said second pair of walls defining the side of said second compartment opposite said dividing wall, a pair of inverted generally U-shaped members disposed at their upper ends alongside the oppositely outwardly facing surfaces of said first pair of vertically extending sides of said members adjacent the point where said dividing wall extends downwardly from said first bottom wall.

7. A school desk comprising a first compartment and a second compartment, a single generally vertically extending dividing wall common to both compartments defining one of the lateral sides of each, a first bottom wall, a first top wall and a first pair of opposed vertically extending walls extending to one side of said dividing wall defining the top, bottom, and two of the lateral sides of said first compartment, said dividing wall projecting downwardly a substantial distance below said bottom wall, a second bottom wall extending horizontally from the lower edge of the downwardly projecting portion of said dividing wall and to the side of the dividing wall that is opposite said first bottom wall, a second pair of opposed vertically extending walls coplanar with said first pair extending upwardly from said second bottom wall defining two of the lateral sides of said second compartment, a vertically extending wall in spaced opposed relation to said dividing wall and extending upwardly from said second bottom wall between two of the lateral edges of said second pair of walls defining the side of said second compartment opposite said dividing wall, a pair of inverted generally U-shaped members disposed at their upper ends alongside the oppositely outwardly facing surfaces of said first pair of vertically extending walls, a cross bar connecting one of the downwardly extending sides of said members adjacent the point where said dividing wall extends downwardly from said first bottom wall, said dividing wall being formed with a horizontally extending slot at said point in which said cross bar is disposed.

8. A school desk comprising a first compartment and a second compartment, a single generally vertically extending dividing wall common to both compartments defining one of the lateral sides of each, a first bottom wall, a first top wall and a first pair of opposed vertically extending walls extending to one side of said dividing wall defining the top, bottom, and two of the lateral sides of said first compartment, said dividing wall projecting downwardly a substantial distance below said bottom wall, a second bottom wall extending horizontally from the lower edge of the downwardly projecting portion of said dividing wall and to the side of the dividing wall that is opposite said first bottom wall, a second pair of opposed vertically extending walls coplanar with said first pair extending upwardly from said second bottom wall defining two of the lateral sides of said second compartment, a vertically extending wall in spaced opposed relation to said dividing wall and extending upwardly from said second bottom wall between two of the lateral edges of said second pair of walls defining the side of said second compartment opposite said dividing wall, a pair of inverted generally U-shaped members disposed at their upper ends alongside the oppositely outwardly facing surfaces of said first pair of vertically

extending walls, a cross bar connecting one of the downwardly extending sides of said members adjacent the point where said dividing wall extends downwardly from said first bottom wall, a second cross bar connecting the other downwardly extending sides of said members below said first bottom wall, and means for releasably securing said second cross bar to said second bottom wall.

9. A school desk comprising a receptacle for school books and the like having a top providing a working surface, a bottom, and a pair of spaced, opposed, generally vertically extending side walls, a pair of identical, inverted, generally U-shaped tubular metal members of rectangular cross-sectional contour disposed at their upper ends closely alongside the oppositely outwardly facing surfaces of said side walls with one of the flat sides of each member flat against each of said surfaces, the sides of each of said members extending divergently downwardly from their upper ends and being connected at said upper ends by a curved bend whereby said sides will provide supporting legs for said receptacle, extensions at the lower ends of said legs telescopically slidable relative to said legs to provide for elevating or lowering said receptacle relative to the floor, and means for securing said extensions to said legs at the desired extension relative to said legs.

10. A school desk comprising a receptacle for school books and the like having a top providing a working surface, a bottom and a pair of spaced, opposed, generally vertically extending side walls, a pair of identical, inverted, generally U-shaped tubular metal members of rectangular cross-sectional contour disposed at their upper ends closely alongside the oppositely outwardly facing surfaces of said side walls with one of the flat sides of each member flat against each of said surfaces, the sides of each of said members extending divergently downwardly from their upper ends and being connected at said upper ends by a curved bend whereby said sides will provide supporting legs for said receptacle, extensions at the lower ends of said legs telescopically slidable relative to said legs to provide for elevating or lowering said receptacle relative to the floor, and means for securing said extensions to said legs at the desired extension relative to said legs, a tubular cross bar corresponding to the material of said members connecting one of the legs of each of said members, and said receptacle being supported on said cross member with the top of said receptacle at about the level of the upper sides of the curved bends connecting each of said pair of legs, an element carried by the other legs of said members, and a recess in the lower side of said receptacle in which said element is adapted to fit.

11. A school desk comprising a receptacle for school books and the like having a top providing a working surface, a bottom, and a pair of spaced, opposed, generally vertically extending side walls, a pair of identical, inverted, generally U-shaped tubular metal members of rectangular cross-sectional contour disposed at their upper ends closely alongside the oppositely outwardly facing surfaces of said side walls with

one of the flat sides of each member flat against each of said surfaces, the sides of each of said members extending divergently downwardly from their upper ends and being connected at said upper ends by a curved bend whereby said sides will provide supporting legs for said receptacle, extensions at the lower ends of said legs telescopically slidable relative to said legs to provide for elevating or lowering said receptacle relative to the floor, and means for securing said extensions to said legs at the desired extension relative to said legs, a pair of tubular cross bars corresponding to the material of said members in cross-sectional contour with the uppermost surface of each of said cross members inclined with respect to a horizontal plane, said cross bars being secured at their ends to the opposed legs of said U-shaped members and extending below said receptacle, the bottom wall of said receptacle being formed with recesses in which said corners are fitted, and means for securing one of said cross bars to said bottom wall.

12. A school desk comprising a receptacle for school books including a horizontally disposed laterally outwardly opening compartment having a pair of opposed lateral sides and a generally vertically disposed upwardly opening compartment with the latter being at the end of said horizontally disposed compartment opposite said open end of the latter and projecting downwardly a distance below the lower side of said horizontally disposed compartment, a generally vertically extending wall between said compartments common to both and forming the said end of said horizontally disposed compartment opposite its said open end, legs for supporting said receptacle above the floor comprising a pair of inverted generally U-shaped tubular members extending over the said lateral opposite sides of said horizontally disposed compartment, said horizontally disposed compartment including a bottom wall, a cross bar connecting one of the sides of each of said members on which said receptacle is supported at the end adjacent the laterally open side of said horizontally disposed compartment, a second cross bar connecting the other two legs of said members, said vertically extending wall between said compartments being formed with a recess in which said second cross bar is received.

ERNEST J. KUMP, JR.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
Re. 16,410	Woolman	Aug. 24, 1926
D. 148,385	Paulus	Jan. 13, 1948
789,800	Doherty	May 16, 1905
860,625	Baylor	July 23, 1907
1,142,865	Westfield	June 15, 1915
1,358,004	Lietz	Nov. 9, 1920
1,892,061	Killins	Dec. 27, 1932
2,541,664	Pollack	Feb. 13, 1951

FOREIGN PATENTS

Number	Country	Date
168,080	Switzerland	Mar. 31, 1934
187,981	Switzerland	May 19, 1936