

Nov. 30, 1937.

A. W. ROWE

2,100,979

FOLDABLE SEAT

Filed Sept. 17, 1935

3 Sheets-Sheet 1

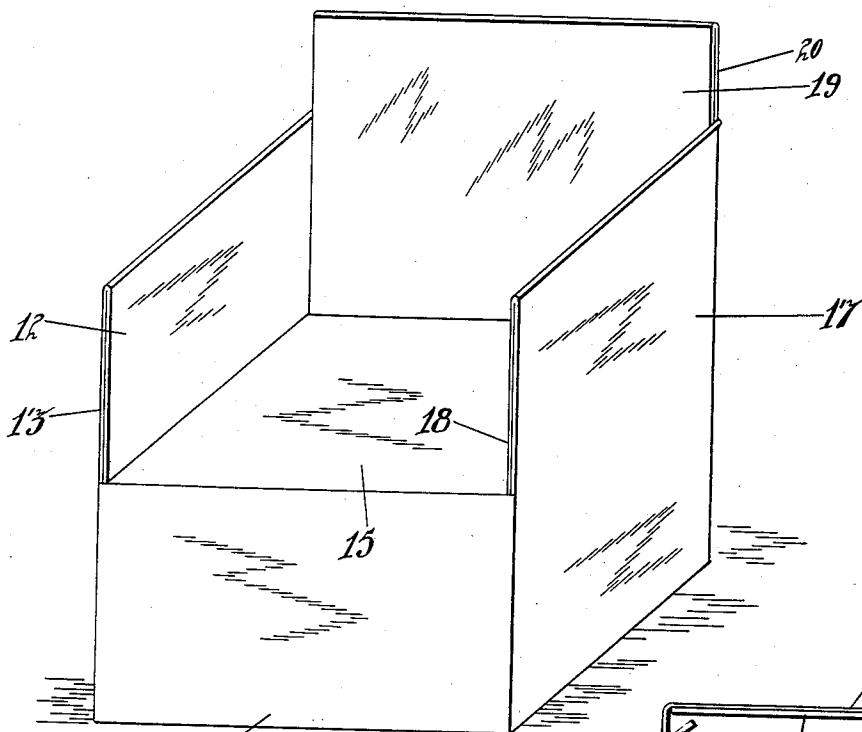


Fig. 1.

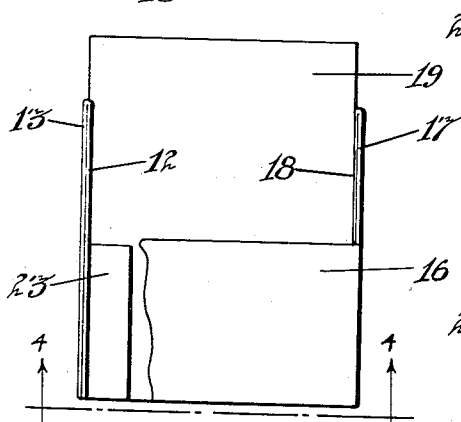


Fig. 2.

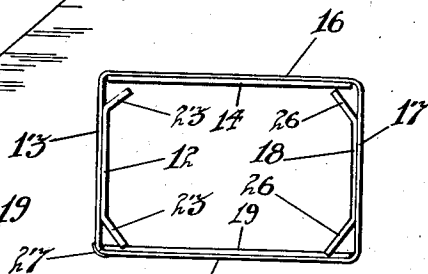


Fig. 4.

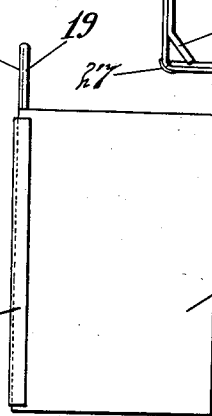


Fig. 3.

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3 Sheets-Sheet 2

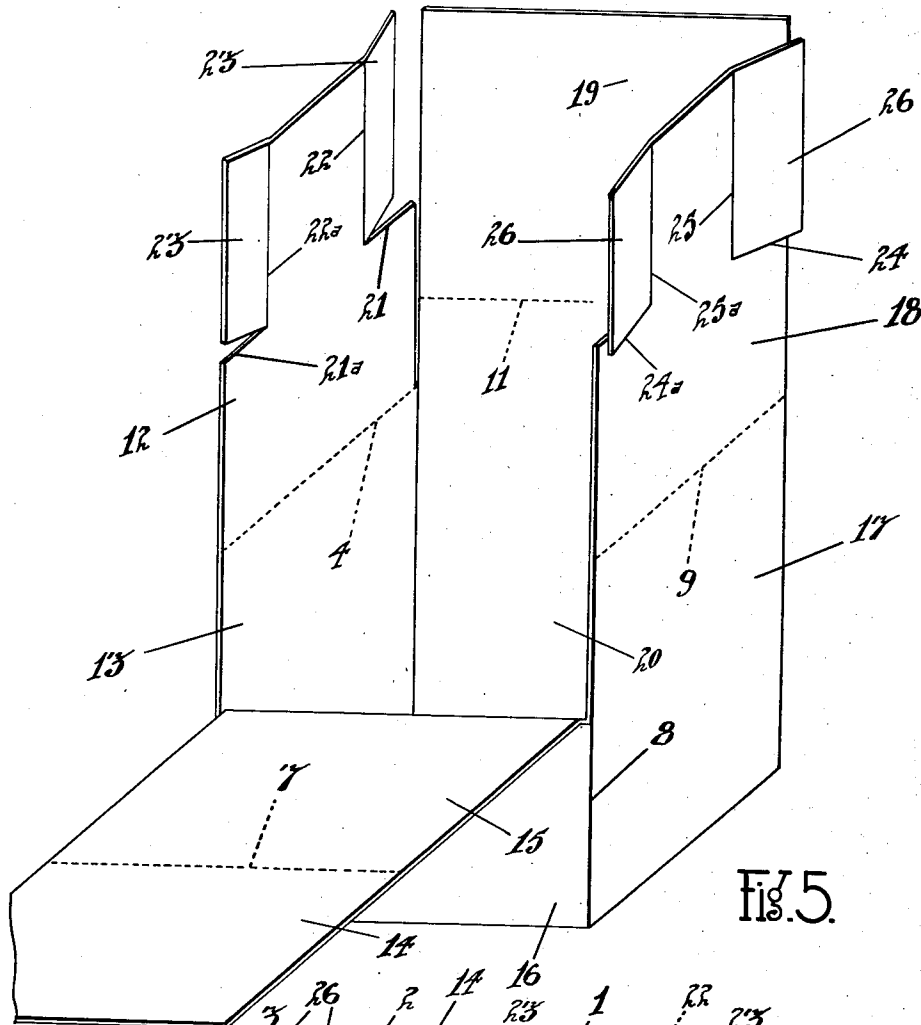


Fig. 5.

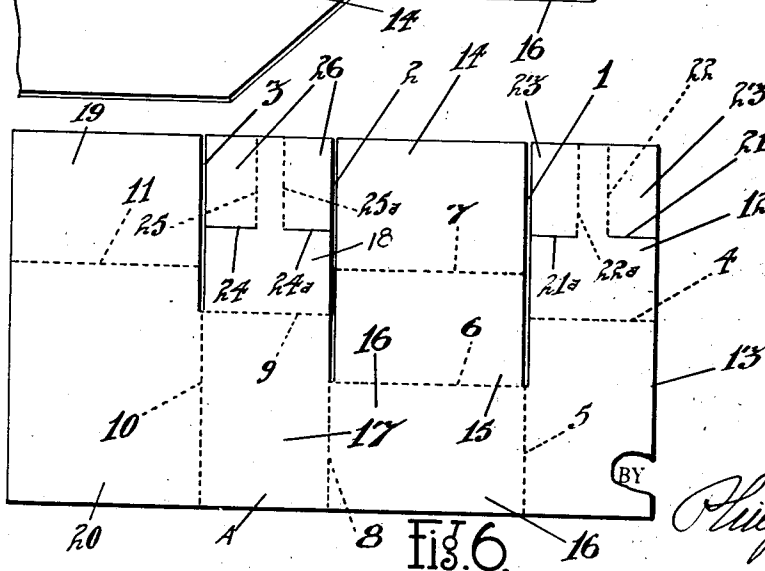


Fig. 6.

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3 Sheets-Sheet 3

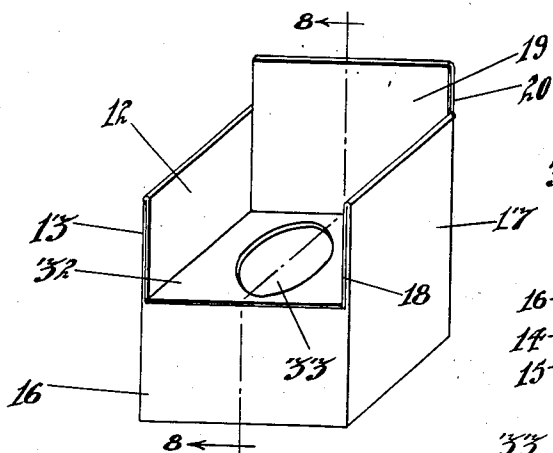


Fig. 7.

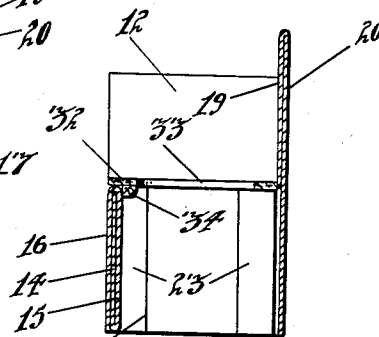


Fig. 8.

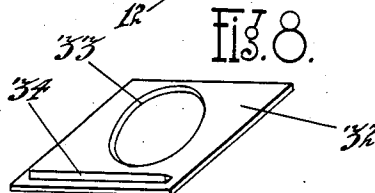


Fig. 9.

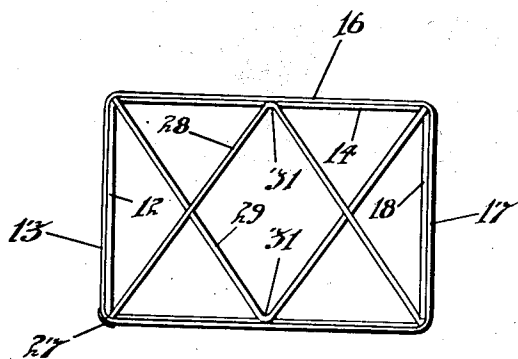


Fig. 10.

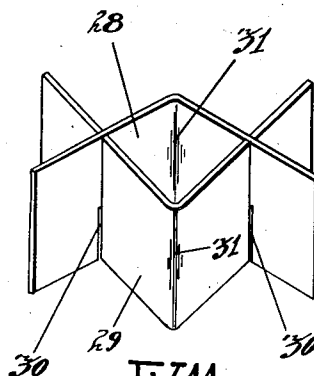


Fig. 11.

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UNITED STATES PATENT OFFICE

2,100,979

FOLDABLE SEAT

Allen W. Rowe, Binghamton, N. Y.

Application September 17, 1935, Serial No. 40,914

2 Claims. (Cl. 155-41)

My invention relates to foldable seats, chairs and the like made from stamped out cardboard and like stiff foldable material.

The principal object of my invention lies in the provision of a seat device formed by folding a stamped, cut and scored sheet of material, such as heavy cardboard, whereby such devices may be provided with maximum economy.

Another object of my invention lies in the provision of such a seat which may be transported and sold in flat form and which requires but a moment's time to fold to operative seat condition.

A further object of my invention lies in the provision of a novel arrangement of scoring and cutting a flat sheet of cardboard or like material whereby the seat when formed and folded to seat arrangement provides a rigid, well reinforced seat or chair capable of sustaining heavy loads.

Although I have shown and will describe my invention as made of heavy cardboard, because of its cheapness and its adaptability for this purpose, I wish it understood that other like materials may be substituted without departing from my invention.

Another object of my invention lies in providing an auxiliary strengthening and reinforcing means for the folded seat whereby to increase its weight capacity.

Still another object lies in the provision of a modified folding of the form whereby to render the device adaptable as a toilet seat.

My invention is particularly directed to a seat for children but is not in any sense a toy. The particular size of the device is optional. Because of the inexpensiveness of the device and its practicability it is especially useful as an advertising device to be given away as a premium in connection with the sale of merchandise.

Other objects and advantages will be apparent as the description proceeds reference now being had to the figures of the accompanying drawings forming a part of this application and wherein like reference characters indicate like parts.

In the drawings:

Figure 1 is a perspective view of the seat formed in accordance with my invention.

Figure 2 is a front view of the seat, certain parts being broken away for clearness of illustration.

Figure 3 is a side view of the formed seat.

Figure 4 is a bottom plan view of the formed seat taken on the line 4-4 of Figure 2.

Figure 5 is a perspective view of the seat in its

partially folded or formed position showing the cuts and scorings provided.

Figure 6 is a plan view of the blank cut and scored in accordance with my invention.

Figure 7 is a perspective view of a modified seat formed as a toilet seat.

Figure 8 is a sectional view taken on the line 8-8 of Figure 7.

Figure 9 is a detail perspective view of the toilet seat attachment.

Figure 10 is a bottom plan view of the formed seat showing the use of the reinforcing attachment.

Figure 11 is a detailed perspective view of the reinforcing attachment.

Referring now particularly to Figure 6, of the drawings, reference character A refers generally to a flat piece of heavy cardboard or like material, preferably rectangular in shape and provided with the cuts 1, 2 and 3 extending inwardly from one side edge of the blank as shown. These cuts 1, 2 and 3 are fairly open so as to permit ready folding of the material between the same.

The blank A is also scored as at 4, 5, 6, 7, 8, 9, 10, and 11 whereby the blank may be readily folded along such scored lines. The cuts and scorings just referred to obviously divide the blank into sections 12, 13, 14, 15, 16, 17, 18, 19, and 20.

The section 12 is slitted inwardly for short distances as at 21 and 21a and scored as at 22 and 22a, the scoring intersecting the inner end of the slit 21 and 21a thus providing flaps 23.

The section 18 is likewise slitted inwardly adjacent cuts 2 and 3, as at 24 and 24a and scored from the inner ends of such slits to the edges of the section as at 25 and 25a to provide the flaps 26. The purpose of these flaps will appear as the description proceeds.

In folding the sections thus formed by the cuts and scorings to provide a seat such as shown in Figure 1, the sections 12 and 13 are together bent at right angles to sections 14, 15 and 16 along the cut and scoring 5. That portion of the blank comprising sections 17, 18, 19 and 20 is then bent at right angles to sections 14, 15 and 16 along the cut 2 and scoring 8 and in parallel position with the sections 12 and 13. Sections 19 and 20 are then together bent along the cut 3 and scoring 10 at right angles to sections 17 and 18 to bring the outer edges of sections 19 and 20 into engagement with the outer edges of sections 12 and 13. With the sections bent in this position, a suitable fastening means such as a strong adhesive tape or the like is applied to the meeting edges of sec-

tions 12, 13 and sections 19, 20. This fastening material extends from a point in substantial alignment with scoring 4 to the bottom edge of the sections in their bent positions as shown clearly in Figures 3 and 4. The binding material or other fastening means is indicated by the reference character 27.

Next the section 19 is bent downwardly along the scoring 11 to lie flat and against the section 20, thus reinforcing the back portion of the seat.

Next section 12 is bent downwardly along the scoring line 4 to lie alongside and in contact with section 13 as shown clearly in Figure 4. The flaps 23 are bent at an angle along the scoring lines 22 and 22a also as shown clearly in Figure 4. Similarly section 18 is now bent downwardly along the scoring 9 parallel to and in contact with section 17 and the flaps 26 bent along the scorings 25 and 25a as shown clearly in Figure 4. These sections 12-13 and 17-18 thus form the side members of the seat.

The section 14 is bent along the scoring 7 alongside and in contact with section 15, and section 15 with section 14 is then bent over along the scoring line 6 at right angles to section 16 to form the supporting seat of the device, resting upon and supported by the upper edges of the flaps 23 and 26.

Thus there is provided out of a single piece of material cut and scored as shown in Figure 6, and with the addition merely of a fastening means for the meeting edges for the ends of the blank, a serviceable, strong, substantial seat or chair device such as is shown clearly in Figure 1, and provided with a back, sides and supporting seat. The cuts 1 and 2, extending beyond the scoring lines 4 and 9, make possible the sides serving as arm rests below the top of the back.

If additional reinforcement is desired, an extra cardboard attachment such as is shown in Figure 11 and constituting merely two slotted pieces 28 and 29, slotted in a conventional manner as at 30 to fasten the two pieces together, and each piece being bent centrally as at 31 to provide an adjustable accordion effect, may be inserted beneath the seat 14-15 as shown clearly in Figure 10. In such case the flaps 23 and 24 are left unbent and lie alongside the sections 13 and 17 in parallel relation, the same as sections 12 and 18.

In Figures 7, 8 and 9 I have shown a slight modification of the seat and in which it will be noted that the seat sections 14 and 15 instead of extending at right angles to the front section 16, are folded downwardly alongside and parallel with section 16 as shown in Figure 8. An auxiliary seat 32 of wood or other suitable material of a size to replace the folded down supporting

seat sections 14-15 is inserted. The auxiliary seat 32 may be provided with the opening 33 and adjacent the front edge of this seat 32 and on the underside thereof is provided a rib 34 adapted to engage with the upper folded edge of the sections 14, 15 and 16, whereby to hold the seat in position.

This auxiliary seat is supported either upon the flaps 23 and 26 or upon the reinforcing attachment 28-29, shown in Figure 11.

Thus there is provided by simple auxiliary attachment a means of converting the seat into a toilet seat for children.

It will be understood also that the particular design and shape of the seat or chair formed in the manner herein described may vary considerably by varying the shape of the blank from which it is formed. Obviously curved sides or other designs of the chair seat might be provided. Also, if desired, additional fastening or binding means may be employed to secure the folded sections together. I do not wish to be limited to the particular shape and style shown and described herein.

Many changes may be made in the form and arrangement of parts without departing from the spirit and scope of my invention. I do not limit myself, therefore, to the exact form herein shown and described other than by the appended claims.

I claim:

1. A seat formed of cardboard or the like, comprising a single blank of material provided with a plurality of cuts and scorings to form back, side, front and seat sections, said sections being bent along said cuts and scorings, said side sections having flaps adapted to be bent to underlie and to support said seat section, flaps extending downwardly to the supporting surface for said seat thereby to form a double wall and means for securing said sections in their bent positions in seat form.

2. A seat formed of cardboard or the like, comprising a single blank of material provided with a plurality of cuts and scorings to form back, side, front and seat sections, said sections being bent along said cuts and scorings, said side sections having flaps adapted to be bent to underlie and to support said seat section, and means for securing said sections in their bent positions in seat form, said seat section being selectively foldable adjacent said front section, and an auxiliary seat member adapted to be supported upon the upper edge of said front section and said flaps, said auxiliary seat having a rib on the underside thereof for engaging the folded seat section for retaining the auxiliary seat in position.

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