This invention relates to a nest of chairs. There are certain places such as small homes, apartments, eating rooms, etc., where it is desirable to have large number of chairs at times and to have only a few chairs at other times. Chairs so constructed that they may be nested are well suited for this purpose.

The primary object of the present invention is to provide a nest of chairs wherein the chairs are strong and durable.

Another object of the invention is to provide a nest of chairs wherein the individual chairs as well as the nest are attractive in appearance.

Another object of the invention is to provide a nest of chairs so constructed that the chairs may be easily and securely placed in nested position.

With these and other objects in view, the invention consists in the improved nested chair construction hereinafter described and particularly defined in the claims. The various features of the invention are illustrated in the accompanying drawings, in which:

Fig. 1 is a view in side elevation of three chairs in a nested position and constructed in accordance with the preferred form of the invention;

Fig. 2 is a top plan view of the chair shown in Fig. 1;

Fig. 3 is a rear elevational view of the nested chair construction shown in Fig. 1;

Fig. 4 is a detailed view partly in section showing one corner of the bottom of the chair;

Fig. 5 and Fig. 6 are detailed plan and elevational views of one leg of the chair.

Preferably the chair forming the present invention is constructed of a sheet metal. Such metal may be steel, copper, aluminum or any of the metals which are usually pressed into form. Steel or some of the alloys is admirably adapted for the manufacture of the chairs because it can be made thin and strong and may be easily pressed into form.

The chair forming the subject of the present invention may be made up of the following separate parts—four legs, a back, a bottom, a seat, and three rungs for connecting the legs. The construction of the legs is shown more particularly in Figs. 5 and 6. Each leg 10 is made from a flat metal sheet compressed into form in order to form an angular member. A flange 12 is formed at the bottom of the leg for contact with the floor, and preferably a rubber pad 14 is secured to the bottom of the flange. A supporting and reinforcing member 16 is formed at the top of the leg by which the leg may be secured to the bottom of the chair.

The construction of the bottom of the chair is illustrated more particularly in Figs. 2 and 4. The bottom 18 is made of flat sheet metal which is pressed in the required form. It is an annulus and is provided around the inner edge with a depression or shoulder 20 which is arranged to receive a seat 22. At each side of the bottom is formed a flange 24 which tends to strengthen the bottom. Near the back of the bottom is formed a slot 26 which is arranged to receive the back of a chair which is located lower in the nest than it is. It will be apparent that the width of slots 28 in the individual chairs will differ. The slot for the uppermost chair in a nest will be the widest because it will have to receive the largest number of backs, whereas the bottom chair will not require any slot. The bottom has holes at each corner which are arranged to receive fastening means such as rivets by which the bottom is securely fastened to the upper end of each of the legs of the chair.

On each side of the angle of a leg are formed a series of slots 28 that are arranged to receive heads 30, see Fig. 1, which are formed on each end of rungs 29. The heads of the rungs have outwardly projecting flanges which extend beyond the normal width of the rungs and these flanges interlock with the slots 28 to prevent a longitudinal movement between the legs and rungs. To hold the rungs from transverse movement in the legs rivets 34 having enlarged heads are arranged to engage both the head and slot of the rungs and legs respectively and to prevent transverse movement of the rungs on the slots. The three rungs extend across the sides and front of the chair.
The back 36 of the chair is made of sheet metal which is pressed and slotted for ornamental design, the back extending both above and below the bottom of the chair. On the portion of the back 36, extending below the bottom of the chair are formed a series of heads 38 which are connected by rungs 40, the heads 38 in turn being arranged to engage slots 42 formed in the two legs positioned at the back of the chair. The back 36 is locked in position in the slots 42 by means of rivets 44 as illustrated in Fig. 3.

The constructional details of each of the chairs of the nest is substantially the same, this construction however being modified for the purpose of appearance. For example, the dimensions and arrangement of the rungs on the chair is such that when the chairs are nested only the rungs on the outer chair (or uppermost chair in the nest) will be visible, the rung on the upper chair acting to conceal the inner rungs. Furthermore, the backs of the chairs are so proportioned as to give the nested chair the appearance of a single back, and the slots in the backs of the chairs are so arranged as to give the appearance of single slots. The chairs may be nested by telescopically sliding the upper chair down over the lower chair along a vertical axis. When they are in a telescopic position the backs of the lower chairs pass through the slots 26 in the upper chairs. To prevent the backs from being scratched as they are moved into and out of telescopic movement, fabric bands 48 are mounted in the slots 50 on the backs to prevent scratching during the movement between the backs of the chairs.

While one specific form of fastening means is shown by which various metal parts forming the chair may be securely connected together, it is obvious that other forms of fastening means may be used. It is important however that the fastening means be so arranged that they will not interfere with the telescopic movement of the chairs or act to scratch the chairs as they are moved into and out of the nested position. For example, welding can be well substituted for the rivets illustrated in the drawings.

Preferably all of the parts of the chair are painted or decorated in some form and thin metal parts are well adapted to be enameled, japanned, lacquered or painted.

Having thus described the invention what is claimed as new is:

1. In a nest of chairs wherein each chair is constructed to fit telescopically over another along the vertical axis, each of said chairs being formed of thin pressed metal parts comprising legs, rungs, and bottom and a back, the legs, rungs and back being fitted together and held against relative longitudinal movement by head and groove joints and held against transverse movement by fasteners.

2. In a nest of chairs wherein each chair is arranged to fit telescopically with reference to another chair along a vertical axis and said chairs being formed of thin pressed metal parts, the construction of a chair comprising legs, rungs and bottom and a back, the leg, rungs and back being fitted together and held against relative longitudinal movement by head and groove joints and held against transverse movement by fasteners and a bottom secured to the legs by fastening means, the said fastening means being arranged to prevent scratching of the finish of the chairs while in nested position.

3. In a nest of chairs the combination of a series of chairs arranged to fit telescopically over one another along the vertical axis, each of said chairs being formed of thin pressed metal parts comprising legs, rungs, and bottom and a back, the legs, rungs and back being fitted together and held against relative longitudinal movement by head and groove joints and held against transverse movement by fasteners, the bottom being secured to the top of the legs by fasteners and the major portion of the bottom being cut away and an offset edge being formed to receive a seat.

4. In a nest of chairs the combination of a series of chairs of substantially the same construction, each chair being arranged to telescopically fit with reference to the next adjoining chair along the vertical axis, and each chair being formed of thin pressed metal parts comprising legs, rungs, a bottom and a back, the legs, rungs and back being secured together by joints which prevent relative longitudinal movement with reference to one another, and being held against transverse movement with reference to one another by means of fasteners which are arranged to prevent projections beyond the faces of the parts which will scratch the finish of the chairs when they are nested.

In testimony whereof I affix my signature.

ALEXANDER D. SCULLY.