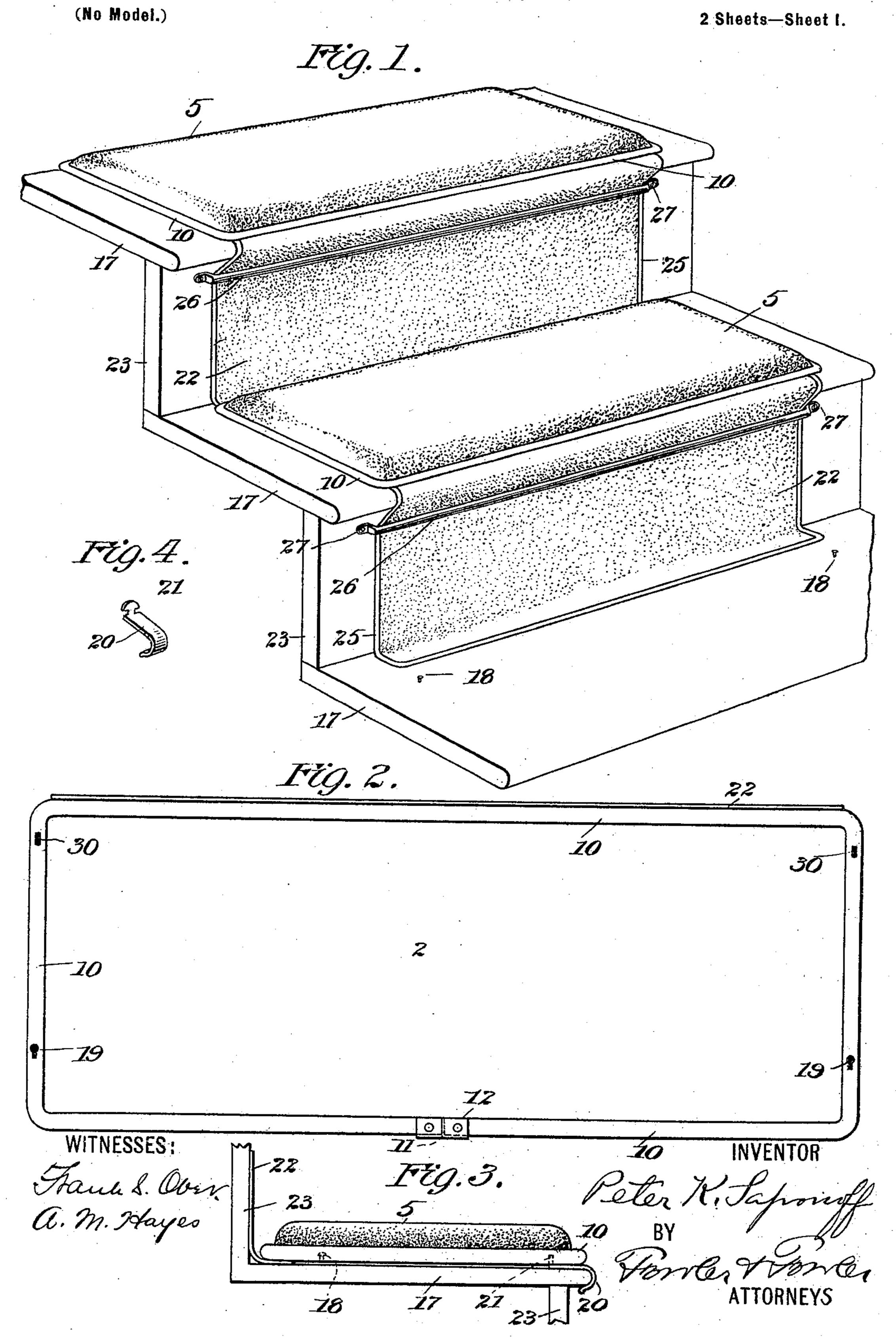
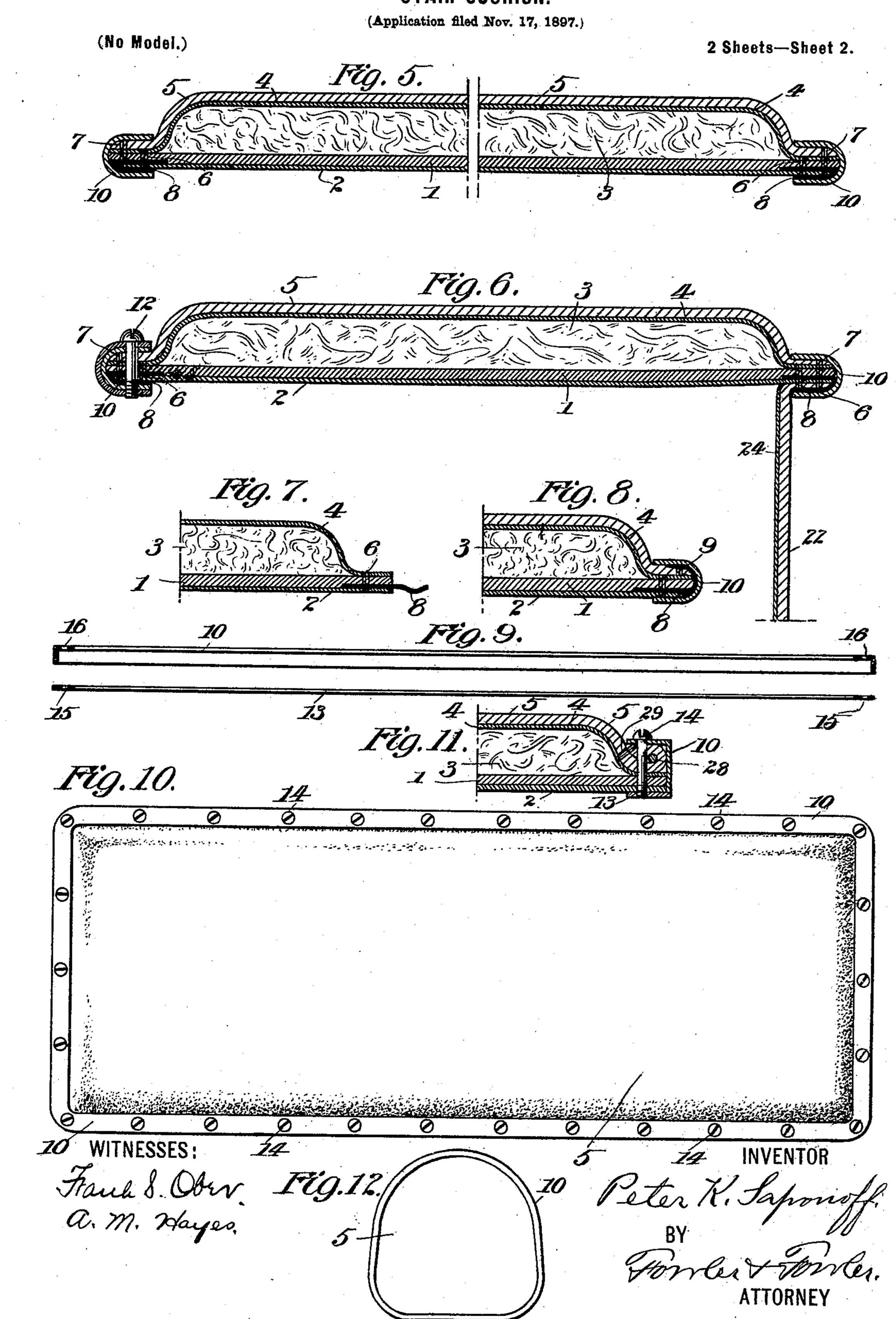
P. K. SAPONOFF. STAIR CUSHION.

(Application filed Nov. 17, 1897.)



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United States Patent Office.

PETER K. SAPONOFF, OF NEW YORK, N. Y.

STAIR-CUSHION:

SPECIFICATION forming part of Letters Patent No. 617,449, dated January 10, 1899.

Application filed November 17, 1897. Serial No. 658,803. (No model.)

To all whom it may concern:

Be it known that I, Peter K. Saponoff, a citizen of the United States, residing at New York, (Brooklyn,) county of Kings, and State of New York, have invented certain new and useful Improvements in Stair-Cushions, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to removable cushions or coverings for stairs; and the principal objects of the invention are to provide a neat and durable covering for each individual step, which may be quickly secured thereto and detached therefrom and that may be readily

cleaned and repaired.

To these ends my invention consists in the various novel and peculiar arrangements and combinations of the several parts of the device, all as hereinafter fully described, and then pointed out in the claims.

I have illustrated a type of my invention in the acccompanying drawings, wherein—

Figure 1 is a perspective view of stairs having applied thereto my removable covering or cushion. Fig. 2 is an under side 30 view of my improved cushion, together with its depending apron, the edge of which is shown at the top of the figure. Fig. 3 is an end view of a step with one of my improved cushions mounted upon it and which is also 35 shown in end elevation. Fig. 4 is a detached view in perspective of one of the removable spring-fasteners for securing the cushion to the tread of the step. Fig. 5 is a view of a longitudinal section of the cushion, which is 40 shown as broken away at the center for the purpose of contracting the figure. Fig. 6 is a transverse sectional view of the cushion, together with its depending apron. Figs. 7 and 8 are sectional views of a portion of the cushion, 45 showing how the same may be repaired. Fig. 9 is a view in longitudinal section of the modified form of the frame within which the cushion is set, the two parts of the frame being shown as slightly spaced from each other. 50 Fig. 10 is a plan view of one of my improved

cushions made up with the form of frame shown in Fig. 9. Fig. 11 is a sectional view of a detail showing the binding or reinforce wire, as will be hereinafter explained. Fig. 12 is a plan view of my improved cushion shaped 55 suitably to be used with an ordinary chair.

Referring to the drawings, in which like numbers of reference indicate like parts throughout, 1 is a layer or piece of suitably stiff material, such as pasteboard or bristol- 60 board, for stiffening the cushion and preserving its shape. The under side of the body-piece 1 is covered with waterproof material 2—such, for instance, as oil-cloth—the waterproof or painted surface of which is 65 placed to the outside. Upon the upper surface of the body-piece 1 is placed padding material 3, such as raw cotton or hair, and over this is placed a layer of waterproof material 4, similar to the waterproof material 2, 70 and with its waterproofed surface uppermost. Over the upper layer of waterproof material 4 is placed a cover 5, consisting in a layer of suitable material, such as textile fabric or leather. The several layers of material 2, 4, 75 and 5 are cut to conform to the shape of the body-piece 1, and being placed in position the bottom layer 2 and the upper layer 4 of waterproofing material are secured to the bodypiece by means of stitching 6, which runs 80 around the entire edge of the pad. After this has been done the cover or carpet 5 is placed in position and is secured by its edges to the edge of the cushion by a row of stitching 7, and this completes the cushion proper. 85

In order to permit of the cover or carpet 5 where the same has become worn or damaged being readily replaced by a new piece, I secure around the edge of the cushion an attaching flap 8, which consists of a piece of braid or 90 webbing placed between the body-piece 1 and the under layer of waterproof material 2 and secured firmly in place along one edge by the first row of stitching 6, so that the other edge is normally free and may be tucked in around 95 the edge of the cushion in any suitable manner and left in such condition that when it is desired to replace the cover it may be readily called into use by ripping out the stitching 7 and removing the cover or carpet 5, as shown 100

in Fig. 7, without, however, destroying the structure of the cushion proper, which still preserves its form, as shown in Fig. 7. The new cover 5 is then secured in place by stitch-5 ing it at 9 directly to the flap 8, which is brought up over the edges of the cushion, as shown in Fig. 8. In this way the cover or carpet piece upon the upper surface of the cushion may be renewed as often as the user de-10 sires.

The cushion thus constructed is set in a rigid or stiff frame 10, which is made, preferably, of metal formed U-shaped in cross-section, so as to receive the edges of the cushion. This 15 frame 10 completely surrounds the cushion and is shown as formed in one continuous piece with the corners rounded, the ends of the frame being brought together at the back edge of the cushion and secured to each other 20 by a clip 11, which receives the ends, each of which is held thereto by a screw 12, as will be understood from Figs. 2 and 6. This frame 10 is made with its outer edge rounded to present a smooth surface without corners, 25 though it may be made of any desired shape and may, if preferred, be formed with an ornamental surface to add to the appearance of the cushion. This frame 10 where it is made of a single piece may be securely fas-30 tened to the edges of the cushion by pressure, though, if preferred, screws or other fasteners may also be used.

In Figs. 9 and 10 I show a frame made up of two parts, 10 being the main portion of the 35 frame, which is L-shaped in cross-section and is of sufficient depth to receive the greater part of the edge of the cushion within it. An auxiliary frame 13 is used in conjunction with the part 10, it being secured thereto 40 after the cushion is inserted by means of screws 14, which pass through holes 15 and 16 of the respective parts 10 and 13 and serve to clamp the two together, so as to securely hold the cushion within the frame. When 45 this form of frame is used, the stitching 6 and 7 may be dispensed with, as the several parts will then be held clamped together between the frames 10 and 13. In using the screws 14 in the frame one or the other of the holes 15 50 16 may be threaded to receive the end of the screw; but as this will require the metal of the frame to be comparatively thick I prefer to use thinner metal and dispense with the thread in the perforation and to use nuts for 55 the screws instead.

In using the two-part frame 10 and 13, the stitching together of the layers of material being dispensed with, I preferably use in conjunction therewith a reinforce strip or piece 60 28, consisting, preferably, of a piece of small wire, which is run around the edge of the four sides of the covering-piece 5 and is sewed in it by turning over such edges and stitching it at 29, as shown in Fig. 11. The screws or fas-65 teners 14 for holding the two parts 10 and 13 together are passed through the material to

the inside of the reinforce-wire 28, and by this arrangement the carpet or cover piece 5 is prevented from pulling out from the frame.

The cushion is removably attached to the 70 tread 17 of the step by any suitable means, the idea being to have the cushion firmly held in place, and at the same time having it so attached that it can be quickly removed. I show one way of removably attaching the cushion, 75 the same consisting of two studs or headed pins 18, which are made fast to the tread 17 of the step and which are designed to take in and lock with the slots 19, formed upon the under side of the frame 10. The slots 19 have 80 their outer ends enlarged, so that the head of the pin 18 may readily pass in and out. The cushion is placed upon the step so that the pin enters the large part of the slot 19, and the cushion is then moved forwardly a slight 85 distance to lock the pin in the smaller part of the slot. Near the forward end of the cushion, at each side thereof, I provide a detachable spring-metal fastener 20, which is in the form of a hook, having at one end a flat head 21, 90 which is adapted to take into a rectangularlyshaped slot 30, formed in the under side of the frame 10 when the hook is turned, so as to project laterally from the cushion. The head of the hook being thus entered in the 95 slot, the hook is given a quarter-turn, so as project forwardly from the cushion and in position to be snapped over the projecting edge of the tread of the step 17. In this way the cushion is securely mounted in place, but 100 may be readily removed by springing the hooks 20 outwardly, so as to disengage that from the edge of the step, and then pushing the cushion inwardly to release the pins 18 from the slots 19. If preferred, the cushion may 105 be attached to the step by ordinary screws passing through holes in the frame surrounding the cushion and taking into the wood of the step, into which screw-sockets may be sunk to receive the screws to prevent muti- 110 lating the step.

Another feature of my improvement is the apron 22, with which the cushion is provided. This appron is secured to the front edge of the cushion and is sufficiently long to hang down 115 over the riser 23 of the step and extend some little distance out upon the tread 17 of the step below, as shown in Figs. 1 and 3. This apron consists of a piece of suitable material and is generally the same material as the 120 cover 5 of the cushion, though a different material may be used in order to form a contrast or cheapen the cost of making the cushion. This apron is provided with a waterproof backing 24, consisting of a layer of waterproof 125 material or oil-cloth with the right side turned outwardly. The apron and its backing 24 are secured together by a braid 25, which is stitched around the edges of the same, as shown in Fig. 1. The apron is shown as 130 being secured to the cushion, preferably, by means of the stitching 6 and 7, (see Fig. 6,)

and its upper edge, by which it is attached to the cushion, is clamped within the frame 10, so as to give it a finished appearance. The apron may be made of a single thickness 5 of material or with the backing, as shown. In order to hold the apron against the riser 23 of the step, I provide a rod 26, which is secured by screws 27 to the riser, and this rod stands out a sufficient distance from the face 10 of the riser to permit the apron to be passed between the two. This rod is preferably round and is placed upon the upper part of the riser almost immediately below the overhanging edge of the tread of the step, and af-15 ter the cushion is secured in place the apron is passed back of the rod and drawn down tightly, with its lower end lying over upon the step below, so that the cushion on such step will overlap it and hold it down, as shown in 20 Figs. 1 and 3.

From the foregoing description it will be understood that the padding and body or stiffening piece of the cushion being protected by the layers 2 and 4 of waterproof material 25 the cover or carpet 5 of the cushion may be cleaned or washed by any well-known cleaning material, such as benzene, without harming the interior structure, and in this respect the cushion presents advantages over those 30 now in use. If it is desired to more completely protect the interior structure of the cushion, the waterproof material 2 and 4 may be made so as to completely envelop the bodypiece and padding, though in the form shown 35 these two pieces practically constitute an envelop. In addition to my improved cushion being so protected by waterproof material as to permit of its being readily cleaned by liquids it is also practically dust-proof, as the 40 waterproof covering serves to exclude the dust from the interior structure of the cushion. By virtue of being dust-proof the article is kept cleaner and purer, and hence its use has advantages over other forms for sanitary 45 reasons.

I not only use ordinary carpet for the cover 5, but also use plush and like material, as well as leather, and contemplate the use of any suitable material and also reversible ma-50 terial. Where the apron is used with the cushion, the two together form a complete covering for the stairs after the manner of an ordinary strip of carpet. At the same time my improvement possesses the advantage that 55 any one step may be uncovered without necessarily uncovering the others.

It will be understood that my improved form of cushion is not limited to use upon stairs; but it may be applied to a chair to 60 take the place of an ordinary cushion or upholstery, as will be understood from Fig. 12, wherein the cushion made as hereinbefore described is shaped to conform to the seat of an ordinary chair, to which it may be secured, 65 so as to hold it in place. It may also be used

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A detachable sectional covering for 70 stairs, each section comprising a cushion having a cover upon its upper surface and adapted to be detachably secured to the tread of the step, and an apron secured to said cushion and extending down over the riser of the 75 step and having its lower edge made fast, substantially as and for the purpose set forth.

2. The combination of a cushion having a cover upon its upper surface, a stiff frame secured to the edges of said cushion, and 80 means for detachably securing the cushion in place, substantially as and for the purpose set forth.

3. The combination of a cushion having a cover upon its upper surface, a rigid frame 85 within which the cushion is mounted by its edges, and a supplemental strip or frame provided with fasteners for securing it to said frame for clamping the cushion within the frame, substantially as and for the purpose 90 set forth.

4. A stair-cushion comprising a layer of stiffening material and suitable padding material, a waterproof jacket enveloping said cushion, and a cover secured upon the sur- 95 face, and means for detachably securing said cushion to the tread of the step, substantially as and for the purpose set forth.

5. A stair-cushion comprising padding material, and a jacket for enveloping the same, 100 a piece of braid or the like secured by one edge around the edges of the cushion, a cover secured to the cushion upon its upper side, said braid being normally concealed and adapted upon removal of the cover to have 105 secured thereto a new cover, substantially as as and for the purpose set forth.

6. The combination of a cushion, a stiff frame secured to the edges of said cushion and detachable spring-fasteners adapted to 110 be secured to said frame for engaging a fixed point for detachably securing the cushion in place.

7. The combination of a cushion, a stiff frame secured to the edges of said cushion, 115 slots formed in said frame for receiving fixed pins to removably secure the cushion in place, and spring-fasteners mounted upon said frame for engaging fixed points to hold the cushion in place.

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8. The combination of a cushion, a stiff frame secured to the edges of said cushion, slots formed in said frame, and detachable spring-fasteners provided with notched ends adapted to take in the slot in the frame and 125 to lock therewith when given a partial turn for detachably securing said cushion in place.

9. The combination of a stair-cushion provided with an apron for covering the riser of the step, and a rod mounted upon the upper 130 part of the riser immediately below the step as a mat in a bath-room or as an ordinary mat. I for holding the apron against the riser.

10. The combination of a cushion, a cover | my hand, this 11th day of November, 1897, in or the upper surface of the same, a reinforce | the presence of two subscribing witnesses. for the upper surface of the same, a reinforce strip or wire secured around the edges of said cover, and a frame provided with fasteners 5 for securing the cushion within it, substantially as and for the purpose set forth.
In testimony whereof I have hereunto set

PETER K. SAPONOFF.

Witnesses: WILLIS FOWLER, A. M. HAYES.