

March 25, 1952

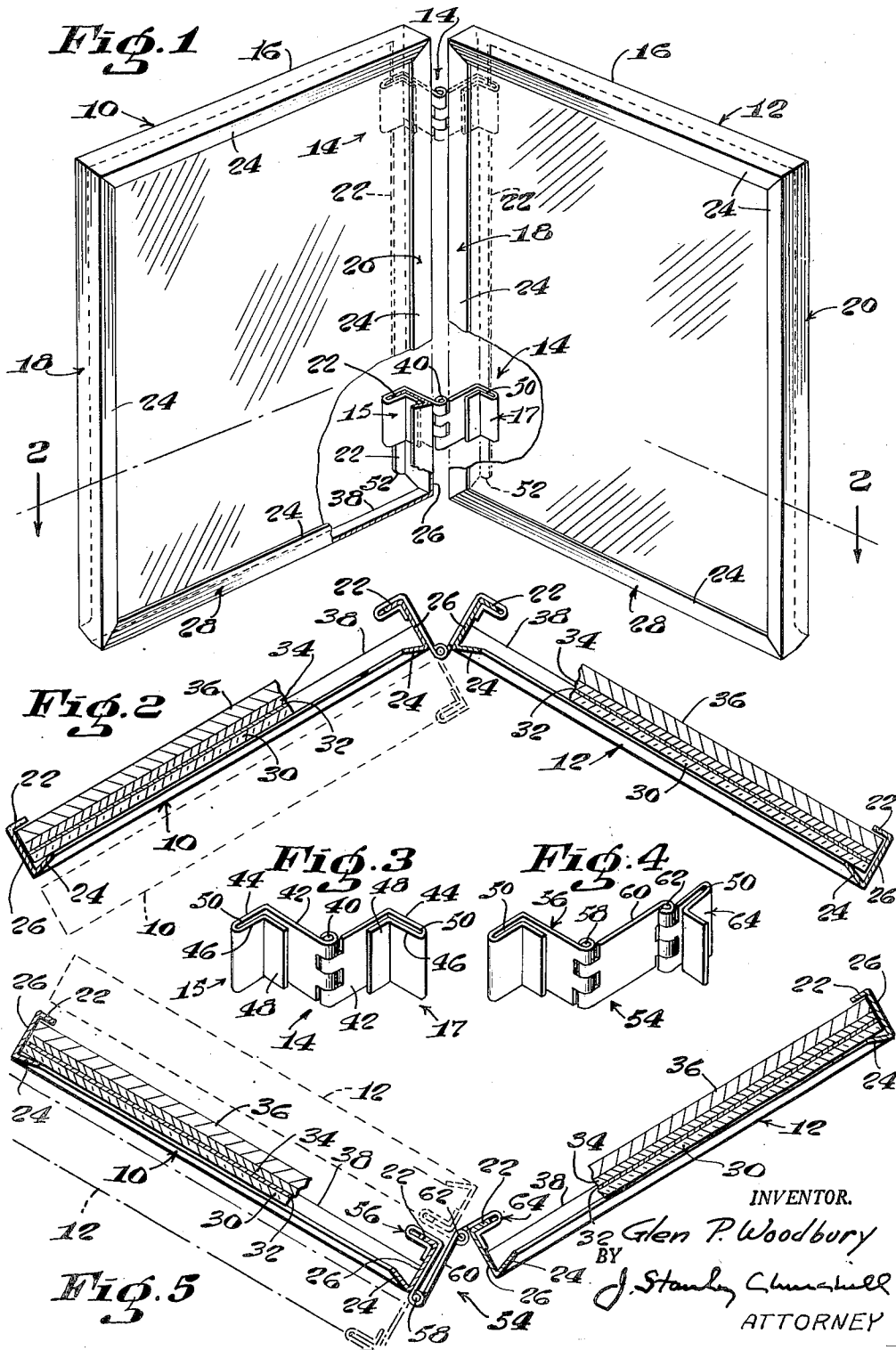
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2,590,744

FRAME FOR PHOTOGRAPHS AND PICTURES

Filed Aug. 16, 1949

2 SHEETS—SHEET 1



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FRAME FOR PHOTOGRAPHS AND PICTURES

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2 SHEETS—SHEET 2

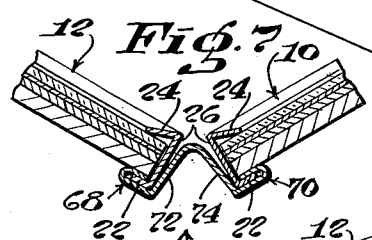
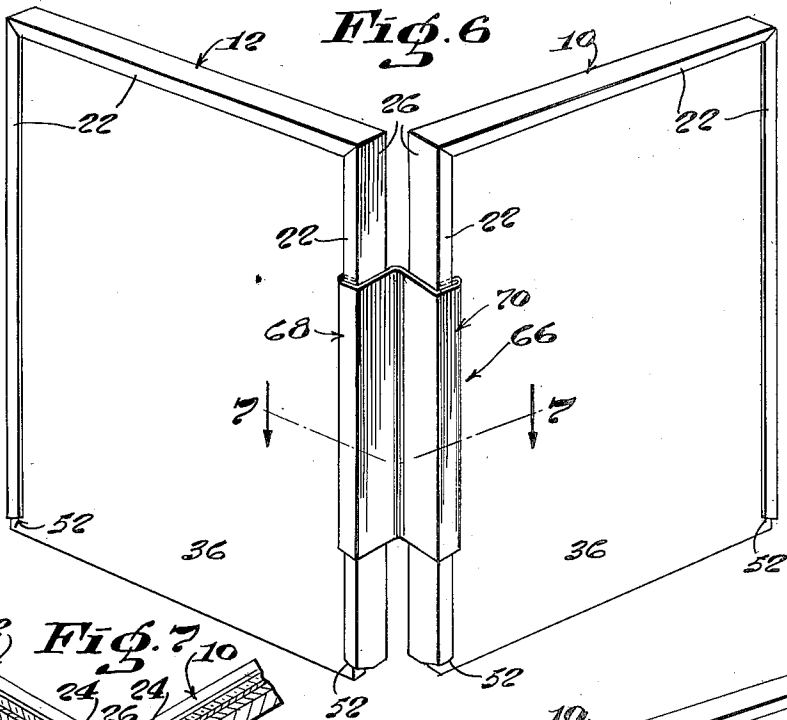


Fig. 8

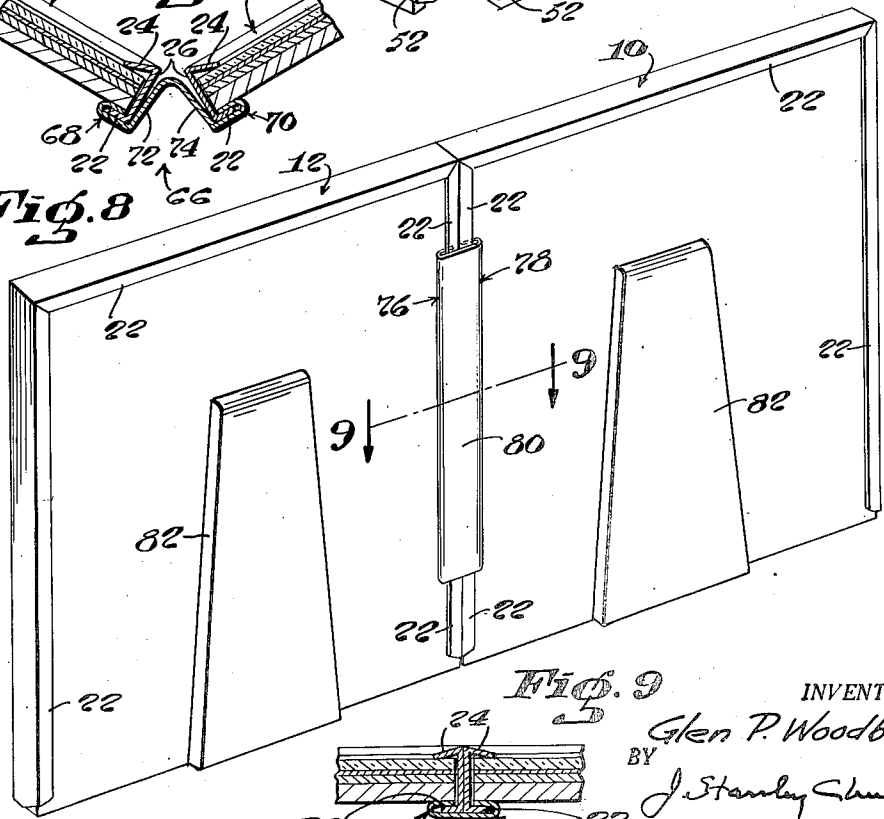
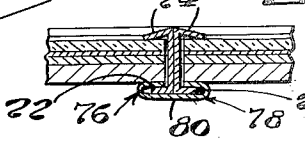


Fig. 9



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2,590,744

## FRAME FOR PHOTOGRAPHS AND PICTURES

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Application August 16, 1949, Serial No. 110,539

1 Claim. (Cl. 40—156)

1

This invention relates to a frame for photographs and pictures and more particularly to a multiple unit frame for the same.

The invention has for an object to provide a novel and improved frame for photographs or pictures which may be constructed by the conversion of a plurality of single frame sections into a connected multiple frame unit in a novel, simple, economical and efficient manner.

With this general object in view, and such others as may hereinafter appear, the invention consists in the frame for photographs and pictures hereinafter described and particularly defined in the claim at the end of this specification.

In the drawings illustrating the preferred embodiment of the invention, Fig. 1 is a perspective view as seen from the front, with portion broken away illustrating a multiple frame unit embodying the present invention; Fig. 2 is a cross sectional view, the section being taken on the line 2—2 of Fig. 1; Fig. 3 is a perspective detail view of a conversion attachment embodied in the multiple frame structure shown in Figs. 1 and 2; Fig. 4 is a similar view of a modified form conversion attachment; Fig. 5 is a cross sectional view, similar to Fig. 2, embodying the modified form of attachment shown in Fig. 4; Fig. 6 is a perspective view, as seen from the rear, of a multiple frame unit showing another form of conversion attachment; Fig. 7 is a cross sectional detail view, the section being taken on the line 7—7 of Fig. 6; Fig. 8 is a perspective view, as seen from the rear, of a multiple frame unit illustrating a still further form of conversion attachment; and Fig. 9 is a cross sectional detail view taken on the line 9—9 of Fig. 8.

Prior to the present invention photographers, gift shops, and other dealers have been obliged to stock a series of different frame units for framing photographs or pictures in single or multiple styles for displaying double, triple or more sets of photographs, adjacent frame sections being permanently hinged together, usually by soldering the wings or flaps of the hinges to the sides adjacent frame sections. The present invention contemplates a novel construction of multiple frame unit embodying a plurality of single style frame sections with adjacent frame sections detachably connected together and preferably also hinged together. The adjacent frame sections may and preferably will be thus connected by novel conversion attachments for the production of a double, triple or other multiple style frame unit so that the photographer

2

or other dealer need stock only the single style frames and the conversion units. In addition, single frames may be manufactured with more advantage and economy as it is difficult to fasten the hinges to adjacent frame sections by efficient soldered joints; and it is also difficult to plate over such soldered joints.

In accordance with the present invention, the conversion attachments for the frame units are designed to be detachably connected to the marginal side edge portions of adjacent single frame sections, the attachments being preferably slidably fitted over the marginal side edges and frictionally engaged therewith to form a connected multiple frame unit. One embodiment of the invention, as illustrated in Fig. 1, includes a hinged structure in which the frame sections may be swung forward facing each other at a suitable angle. A second embodiment of the invention, as illustrated in Fig. 5, includes a hinged structure designed to permit swinging of the frame sections either forwardly or backwardly to display the photographs or pictures at any desired angular position relative to each other. A further embodiment of a multiple unit frame, as shown in Fig. 6, may include a non-hinged conversion attachment, the attachment permitting a certain degree of flexibility so that the frame sections may be set at a suitable angle relative to each other. A still further embodiment of the invention may include a fixed conversion attachment adapted to detachably connect a plurality of single frame sections in side by side or edge to edge alignment, as will be hereinafter more fully described.

Referring now to the drawings, and particularly to Figs. 1, 2 and 3, the numerals 10, 12 represent two similar single frame sections detachably connected together by novel conversion elements or attachments, each herein shown as comprising a single hinge conversion element of attachment, indicated generally at 14, adapted to slidably and frictionally engage and embrace the adjacent marginal side edges of two individual frame sections. As herein shown, each single frame section comprises a rectangular structure manufactured of relatively thin sheet metal strips bent to form a substantially U-shaped or inwardly flanged cross section along the top 16, and two sides 18, 20, the legs or flanges 22, 24 of the U extending inwardly to form a marginal retaining chamber. The rear leg or flange 22 of the U is bent substantially at right angles to the outer edge 26 of the frame, and, the front leg 24 of the U is bent inwardly slightly

3

beyond a right angle to the outer edges 26 so as to impart an inwardly beveled effect to the front or face of the frame. The lower or bottom member 28 of the frame is formed substantially V-shaped in cross section, the V being coextensive with the front leg 24 and a portion of the outer edge 26 of the U-shaped sides, so that, in effect, the rear leg or flange 22 and a portion of the outer edge 26 is omitted at the bottom to provide a space or access opening through which the glass, photograph and backing members of the frame may be inserted. Thus, as indicated in Fig. 2, a sheet of glass 30 may first be inserted through the bottom opening and fitted into the frame to rest against the inwardly bent retaining edges 24, then the photograph 32 and an intermediate fibrous or other protective or backing member 34, may be inserted, and finally a felt or plush covered backing or retaining member 36 may be fitted into the back of the frame, all of the inserts fitting rather snugly in the marginal retaining chamber formed by the inwardly extended marginal flanges. The horizontally extended bottom edge 38 of the V-shaped portion of the frame defining the access opening is arranged to support and retain the bottom edge of the glass in the frame, the photograph and the backing members being frictionally held in place in the retaining chamber between the legs or marginal flanges 22, 24 of the frame.

As shown in detail in Fig. 2, the single hinge detachable conversion element 14 is designed to slide over and frictionally embrace the marginal edges including the adjacent outer edges 26 and rear legs or flanges 22 of two or more frame sections 10, 12 to convert a pair of single frames into a double or other multiple frame unit, and, as herein shown, see Fig. 3, each attachment 14 may comprise two similar wing or flap sections 15, 17 connected by a hinge pin 40. Each flap section comprises a strip of thin sheet metal having a flat portion 42 arranged to fit against the outer edge 26 of the side of the frame, a portion 44 bent at right angles to the flat portion and arranged to fit against the outer face of the rear flange 22, and a portion 46 bent over the end of the flange and inwardly parallel to the inner face of the flange, the free end 48 being bent forwardly to extend parallel to the flat portion 42 and in engagement with the inner face of the portion 26 of the frame for a short distance, thus forming a right angle or substantially V-shaped socket 50 arranged to be slipped over the rear marginal flange sections from the bottom and moved along to the position desired. As indicated at 52 in Fig. 1, and as also shown in a rear view of the frame sections in Fig. 6, the rear portion of the frame sections are open at the bottom, the rear side flanges 22 terminating short of the lower end defining the open portion of the frame to facilitate assembly of the socket over the rear marginal flanges 22 of the frame section. The conversion attachment may be assembled with the frame sections either before or after the glass and backing members are inserted in the frame, the relatively thin metal of the attachment permitting the same to be easily received between the rear leg 22 and the backing member 36. In addition, the backing member 36 may be of a relatively yieldable or resilient character to fit snugly against the adjacent portions of the assembled attachment. In practice any number of conversion attachments 14 may be employed between each pair of single frame sections.

From the description thus far it will be ob-

4

served that the conversion element 14 illustrated in Fig. 1 is arranged to two or more single frame sections into a multiple frame unit in which the hinge permits the frame sections to be swung forward to any convenient angle relative to each other so as to enable the multiple frame to be self-supporting when placed on a table or other flat surface. As indicated in dotted lines in Fig. 2, the frame sections 10, 12 may be folded face to face for packing or shipping purposes.

In the embodiment of the invention shown in Fig. 5, a modified form of hinged conversion element or attachment arranged to slide over and frictionally engage the rear marginal edges of adjacent frame sections comprises a double hinge structure, indicated generally at 54, adapted to permit swinging of the frame sections 10, 12 either forwardly or backwardly relative to each other, the sections being shown in Fig. 5 as swung backward at an angle relative to each other so that the photographs may be displayed facing in a direction away from each other. In this embodiment the frame sections may be folded either back to back or face to face in a double frame unit, as shown in dotted, and dot and dash lines respectively in Fig. 5, and, in an embodiment comprising three or more sections, the sections may be folded alternately face to face and back to back to form a compact unit for display or for shipping purposes. The double hinge conversion attachment 54, as shown in detail in Fig. 4 includes one hinge flap 56, similar to the hinge flap 15 of the single hinge attachment 14, bent to form a right angle flange socket 50, and connected by a hinge pin 58 to an intermediate flap portion or link 60 which in turn is connected by a hinge pin 62 to a third flap member 64 comprising a relatively short portion also bent to provide a flange socket 50 arranged to fit over the rear marginal flanges 22 of the adjacent frame section in a manner similar to that described in the embodiment illustrated in Fig. 1. The intermediate link 60 may and preferably will be of a length substantially equal to or slightly greater than the thickness of a frame section, as shown, to dispose the pivots at points spaced to permit the folding movements above described.

Referring now to Figs. 6 and 7, a modified form of multiple frame structure embodying the present invention, includes a conversion attachment, indicated generally at 66, and which comprises an elongated integral strip of thin sheet metal bent inwardly along its marginal side edges to form flange socket portions 68, 70 arranged to slidingly embrace and frictionally engage the rear flanges 22 of adjacent frame section 10, 12 and having an intermediate portion provided with a longitudinal medial bend forming side engaging walls 72, 74 extending substantially at right angles to the socket portions 68, 70 respectively. The conversion attachment 66 may and preferably will be manufactured of a sheet metal of a character having a certain degree of flexibility so that the medial portion may be bent at any desired angle with the photograph sections facing generally toward each other, thus providing a relatively fixed attachment capable of being bent to varying angular positions, as desired. In practice, a single conversion attachment 66 may be provided between each pair of frame sections 10, 12, the length of the attachment being proportioned relative to the overall length or height of the frame sections to provide adequate lateral support.

The form of the invention illustrated in Fig 8

5

is designed to detachably connect a plurality of frame sections 10, 12 in side by side or edge to edge alignment, and as herein shown, includes an elongated flat strip of thin sheet metal bent inwardly along its marginal side edges to form flange socket portions 76, 78 arranged to slidably embrace and frictionally engage the rear marginal flanges comprising the legs 22 of adjacent frame sections. As shown in detail in Fig. 9 the width of the intermediate flat portion 80 of the conversion attachment is substantially equal to the combined length of the two aligned leg portions 22 of adjacent frame sections in contiguous engagement. In this embodiment, the frame sections may be provided with the usual back stand supports 82, as shown.

From the above description, it will be seen that the present invention provides a novel multiple style photograph frame unit formed from a plurality of single style frames by the use of a novel detachable conversion element adapted to frictionally engage the marginal edges of adjacent frame sections whereby the photographer or other dealer need only stock the single style frames and enabling double, triple or other multiple unit styles of frames to be supplied in accordance with the customers requirements.

While the preferred form of the invention has been herein illustrated and described, in its broader aspects the invention contemplates and includes various structures of connecting members which may be attached to the adjacent frame sections in a rapid and practical manner. Preferably the connecting members may be provided with sockets for cooperation with the flanges on the rear of the adjacent side edges of adjacent frames as above described, but it is

6

understood that the invention is not limited thereto.

While the preferred embodiments of the invention have been herein illustrated and described, it will be understood that the invention may be embodied in other forms within the scope of the following claim.

Having thus described the invention, what is claimed is:

10 A multiple unit frame for photographs and pictures comprising a plurality of single frame sections having inwardly flanged marginal edges, and a connecting element detachably engaging the adjacent flanged marginal side edges of two adjacent single frame sections to form a multiple frame unit, said connecting element comprising a double hinged member having a pair of flaps formed to provide sockets adapted to slidably and frictionally engage the rear flanges of said marginal side edges, and an intermediate flap connecting said pair of flange engaging flap members, the pivots of said double hinged member being disposed substantially in alignment with the front and rear faces respectively of said frames to permit swinging of the sections either forwardly or backwardly relative to each other.

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