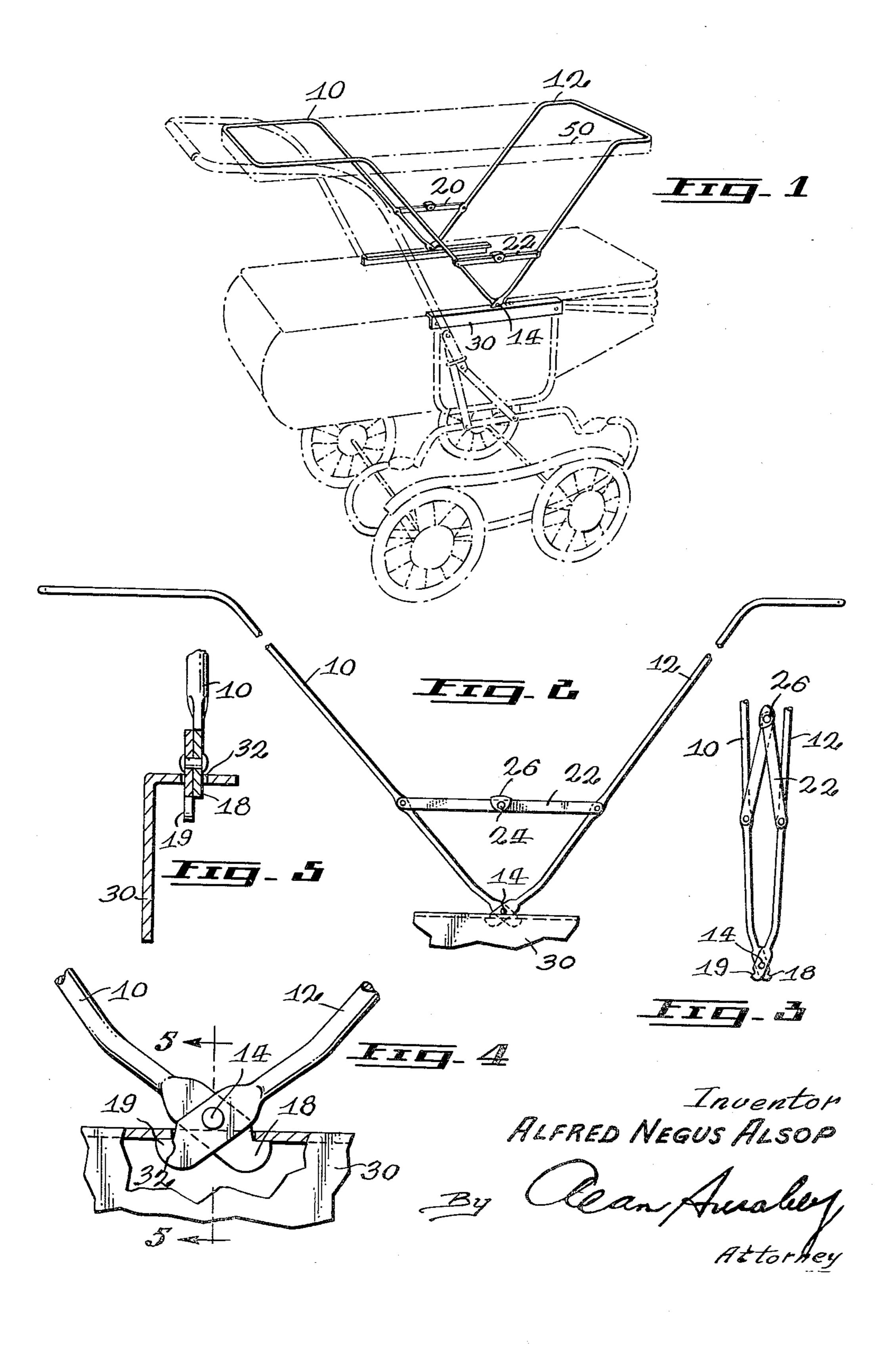
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CANOPY FRAME

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The present invention relates to improvements in the 10 construction of baby carriages or the like and more particularly to an improved construction of a collapsible sun canopy for such carriages and/or strollers.

While collapsible or removable sun canopies suitable for attachment to baby carriages are presently available, 15 these, due to their construction are somewhat complicated and difficult to install. These canopies usually consist of a wire or rod frame for supporting the canopy proper, generally made of flexible fabric, with portions of the wire frame also serving as supports to hold the can- 20 opy above the carriage body. Usually the supporting portions of the wire are fitted into a pressed steel end or bracket which in turn is shaped to fit over the existing peg or bolt used to attach the carriage hood. In order to stabilize the canopy cords or straps are attached to the 25 front and rear wires of the canopy and are tied to the body or axles of the carriage. These arrangements, in addition to being somewhat difficult to assemble to the carriage are also a nuisance in getting a child into and out of the carriage.

The present invention aims to provide an improved canopy frame construction which eliminates the disadvantages mentioned and which can be easily and quickly assembled to carriage or stroller. In accordance with substantially U-shaped portions pivotally joined at their extremities to form a folding tong-like frame with the terminal ends of the frame portions extending beyond the pivotal joint being shaped to provide opposed outwardly facing hooks. These are so disposed that when 40 the frame is folded they are moved in towards each other and are thus adapted to freely fit into slots provided at each side of the stroller or carriage frame. When the frame is unfolded the end hook portions move outwardly relative to each other and thus firmly engage the portions 45 of the carriage frame bordering the slots. In the preferred construction connecting or "make and break" links are provided between the frame sections so that they can be locked in extended or unfolded condition.

Having thus generally described the nature of the in- 50 vention, particular reference will be made to the accompanying drawing showing a preferred embodiment thereof, and in which:

FIGURE 1 is a view in side elevation of a carriage construction (shown in broken lines) with a canopy con- 55 struction in accordance with the invention shown in attached condition (flexible cover indicated in broken lines).

FIGURE 2 is an enlarged side view of the canopy frame assembly shown in FIGURE 1.

FIGURE 3 is a side view of the end portions of the canopy frame shown in FIGURES 1 and 2 as they would appear in folded condition.

FIGURE 4 is an enlarged detail view of the terminal ends of the canopy frame portions to illustrate more 65 clearly their locking action in the slot of the frame side member.

FIGURE 5 is a sectional view of FIGURE 4 along the line 5—5 to further illustrate the locking action.

With particular reference to FIGURES 1 and 2 of 70 the drawings, a preferred construction of a folding canopy frame in accordance with the invention is shown as

consisting of a pair of similar substantially U-shaped frame members 10, 12 pivotally interconnected at each side as indicated at 14. The ends of the members 10, 12 at the point of pivotal connection are flattened and shaped to provide opposed hook portions 18, 19. Connecting links 20, 22 are pivoted to the members 10, 12 and are centrally pivoted as indicated at 24 with a oneway clip 26 so as to constitute a "make or break" joint for the members 10, 12.

In accordance with the invention, the carriage is provided with side arms or plates 30 which are provided with slots 32 adapted to receive the frame end portions 18, 19 when folded, towards each other as shown in FIGURE 3. When extended, by the unfolding of the members 10, 12 the frame end portions 18, 19 engage the ends of the slots 32 and the under portion of the carriage plate 30, as shown in FIGURE 4, to firmly retain the frame in position. Extension of the connecting links 20, 22 as shown in FIGURE 2, locks the frame end portions 18, 19 in this condition.

To release and remove the canopy the links 20, 22 are "broken" and the frame members 10, 12 folded as shown in FIGURE 3, permitting the easy withdrawal of the frame end portions 18, 19 from the slots 30.

As will be appreciated, while not illustrated in detail, a canopy covering 50, as indicated in broken lines, is mounted over the upper ends of the frame members 10, 12. This is made from suitable flexible material as is known, for example, from similar material to the body 30 of the carriage to which the canopy is to be attached.

It should also be mentioned that the frames or plates 30 are integral ports of some carriage constructions and normally include slots 32 to accommodate the usual carriage hood attachments. In other constructions not the invention, the canopy frame is made in two similar 35 having hood attachments, a separate plate or bracket may be added at each side of the carriage frame in the location as shown to provide the canopy attachment points. I claim:

- 1. A collapsible canopy supporting frame adapted for use in combination with a carriage having opposed slotted frame members, one at each side, comprising a pair of substantially U-shaped frame members having leg portions intersecting and pivotally connected to each other adjacent their free ends with terminal portions of each member extending beyond said pivotal connection, said member terminal portions being shaped to constitute opposed outwardly facing hook portions adapted to fit within said opposed carriage frame member slots when said supporting frame members are folded towards each other and to extend and engage said carriage frame member portions bordering said slots when said supporting frame members are unfolded away from each other, and link means extending between said supporting frame members adapted to maintain said members in unfolded condition.
- 2. A collapsible canopy supporting frame, as claimed in claim 1, wherein said link means comprises a pair of link arms pivotally connected to and extending between said supporting frame member leg portions above said 60 pivoted interconnection, said link arms each consisting of two pivotally interconnected portions.
 - 3. A collapsible canopy supporting frame adapted for use in combination with a carriage having opposed slotted frame members, one at each side, comprising a pair of substantially U-shaped frame members pivotally interconnected at each side to provide opposed unequal X-frame portions, the end portions of said members extending beyond said pivotal connection and constituting the shorter arms of said X-frame portions being shaped to provide outwardly facing hook portions adapted to freely fit within the slots of said carriage frame members with the longer arms of said X-frame portions folded

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towards each other and to engage the portions of said carriage frame members bordering said slots when said longer arms are spread one from the other, and means to retain said X-frame portions in spread condition.

4. A collapsible canopy supporting frame, as claimed 5 in claim 3, wherein said means to retain said X-frame portions in spread condition comprise centrally connected link arms extending between and being pivotally con-

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nected to the longer arms of said X-frame portions above said frame pivotal connection.

References Cited in the file of this patent UNITED STATES PATENTS

116,226	Seipt June 20,	1871
-	Meinecke May 2,	