

No. 680,094

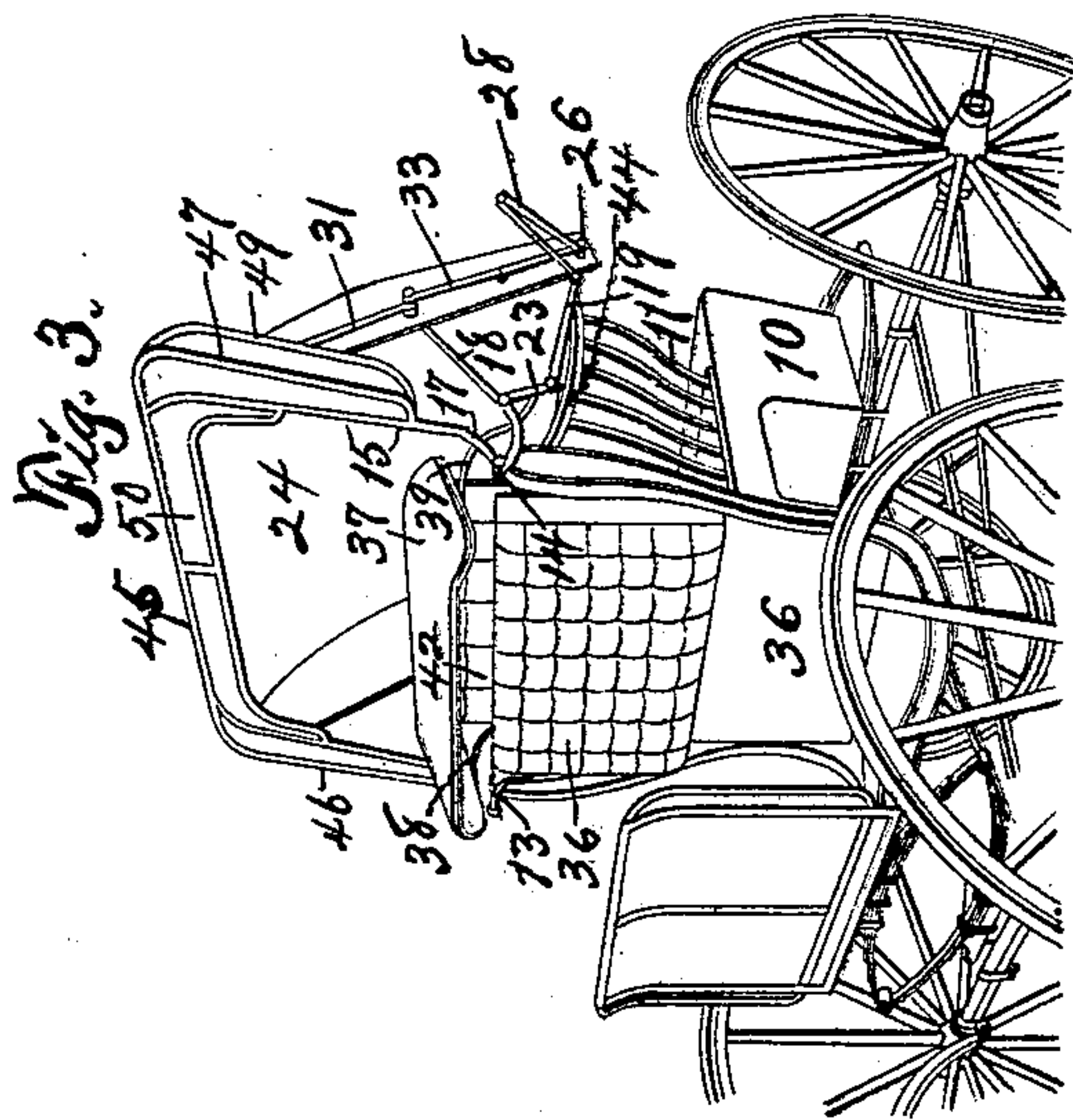
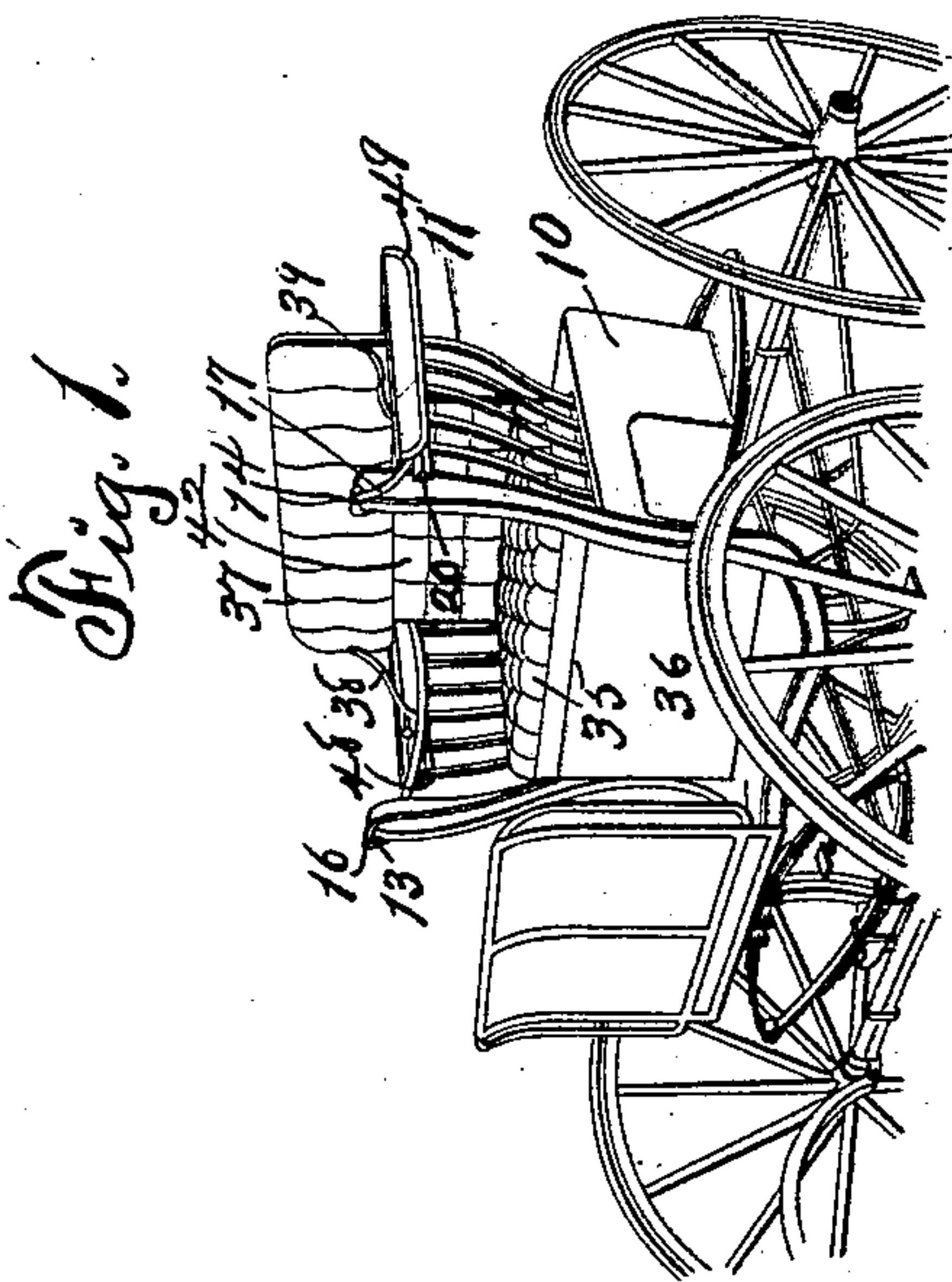
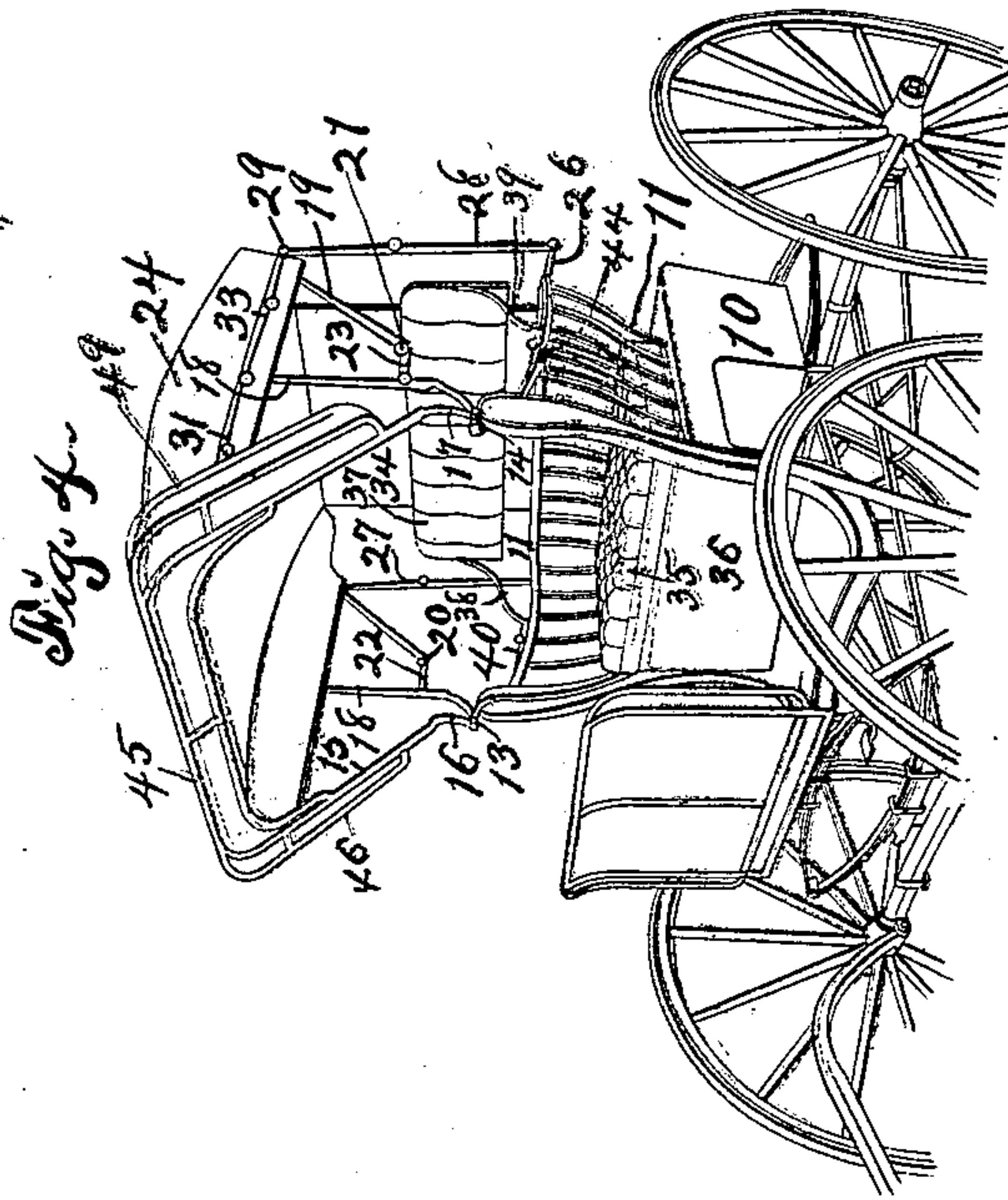
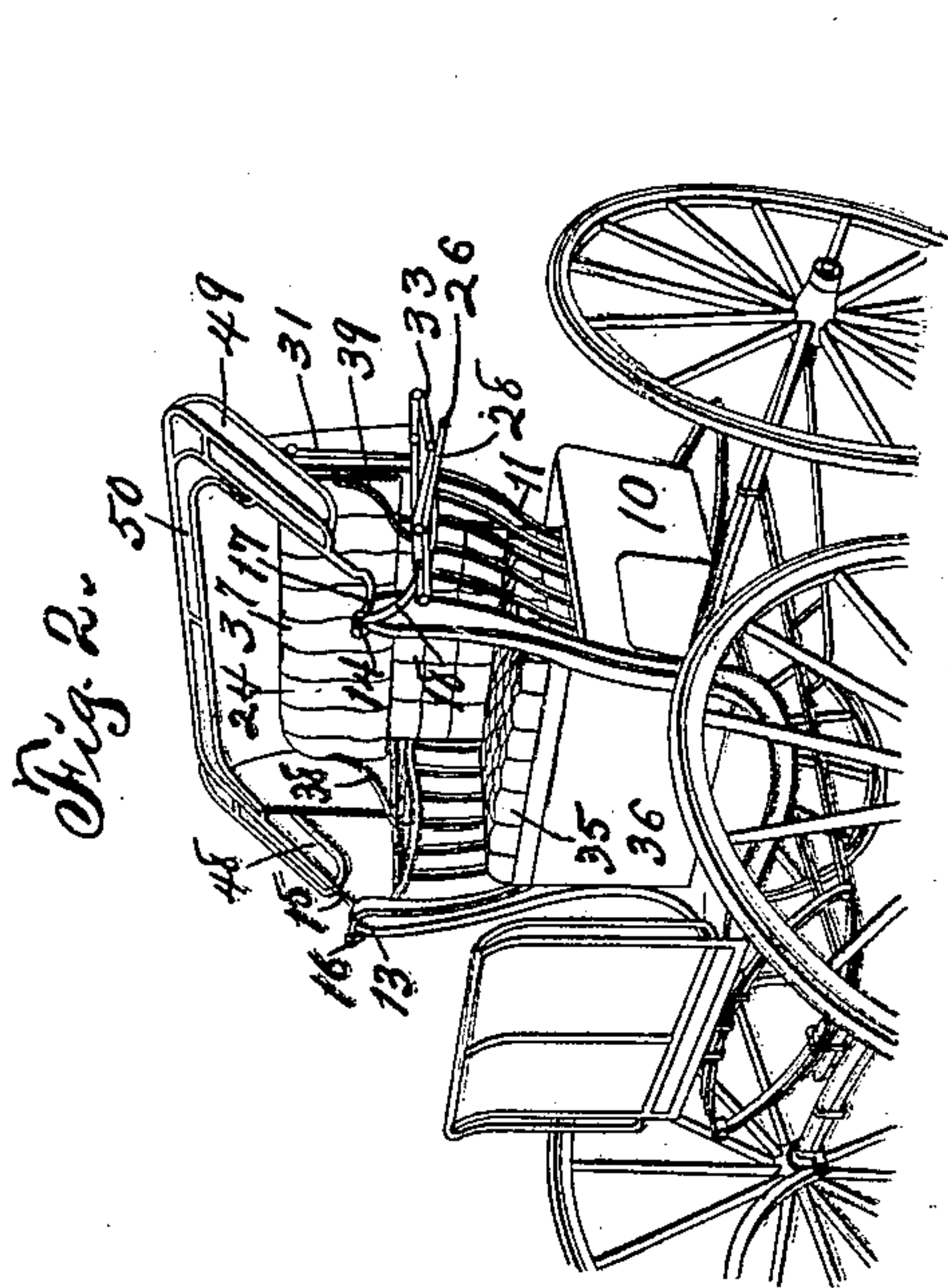
Patented Aug. 6, 1901.

J. O. WELLS.
BUGGY TOP.

(Application filed June 15, 1900.)

(No Model.)

4 Sheets—Sheet 1.



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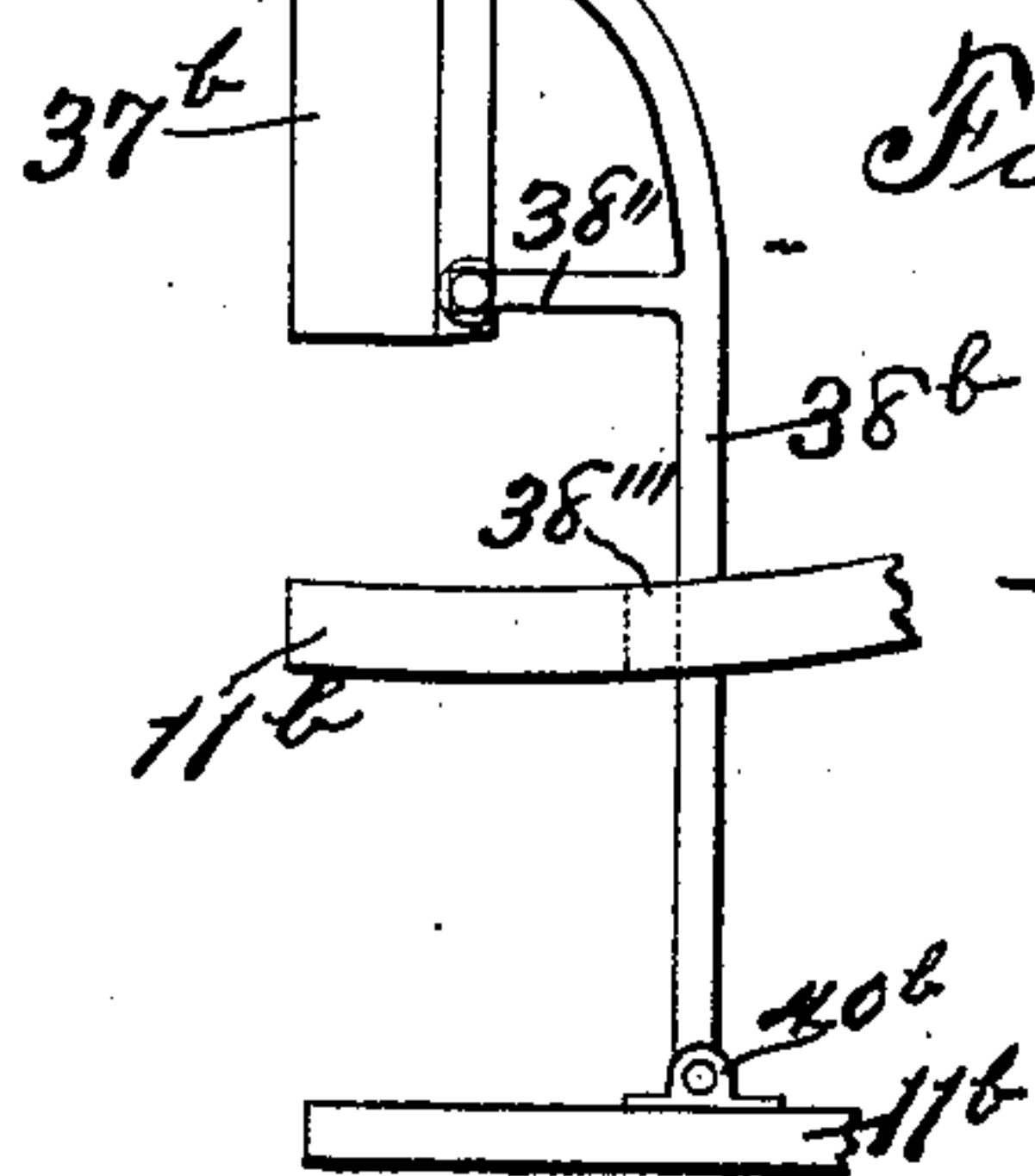
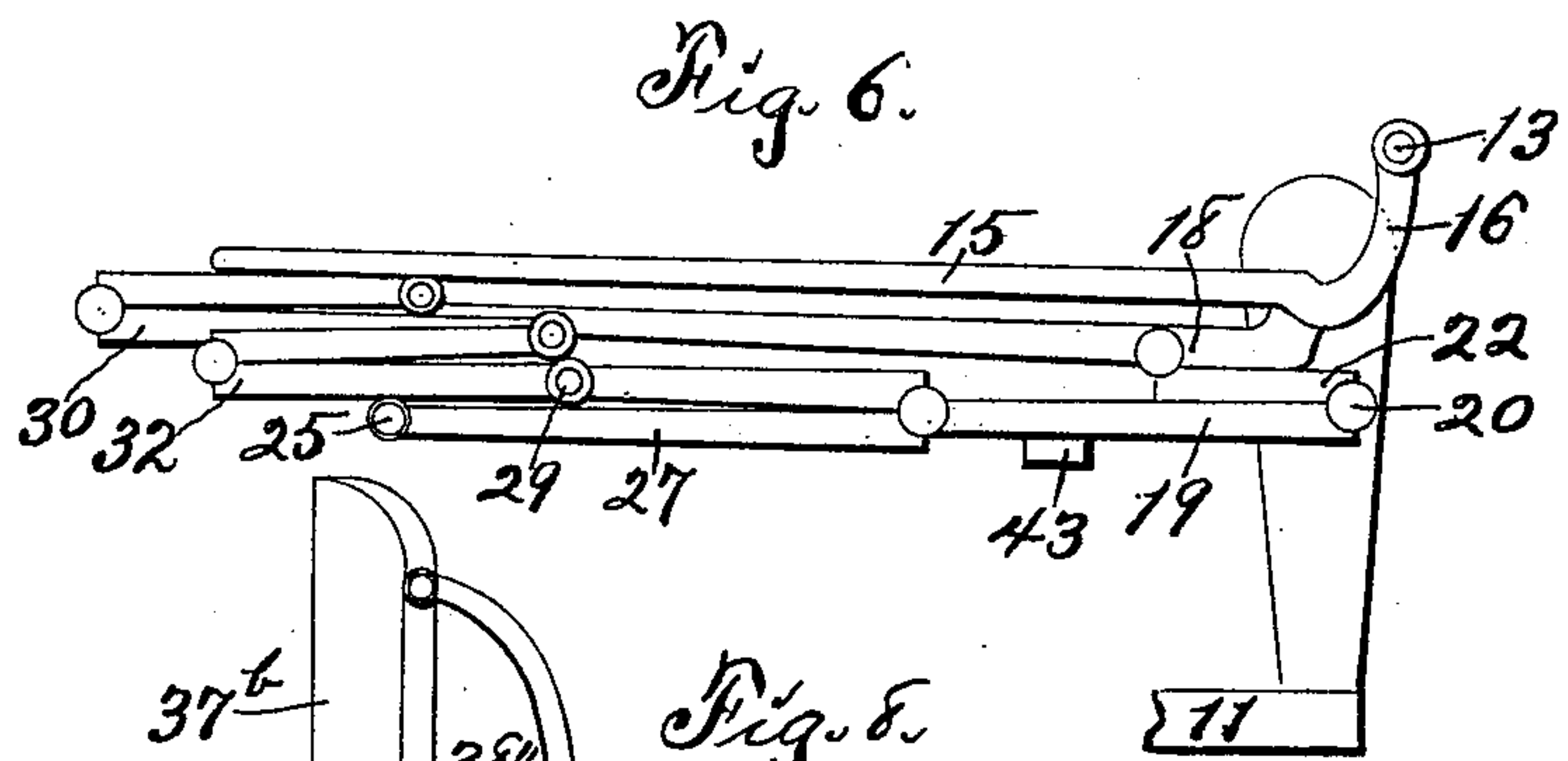
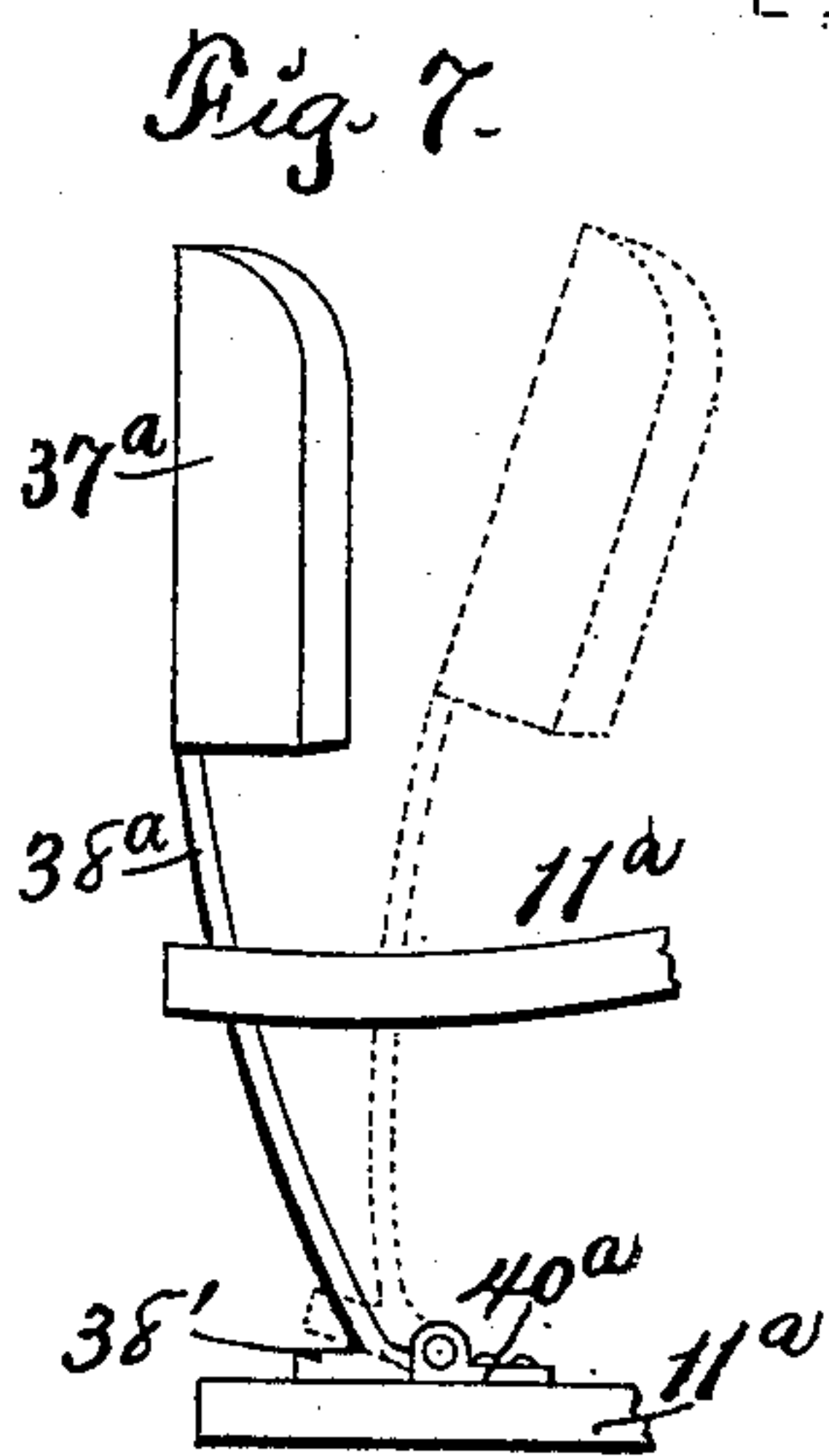
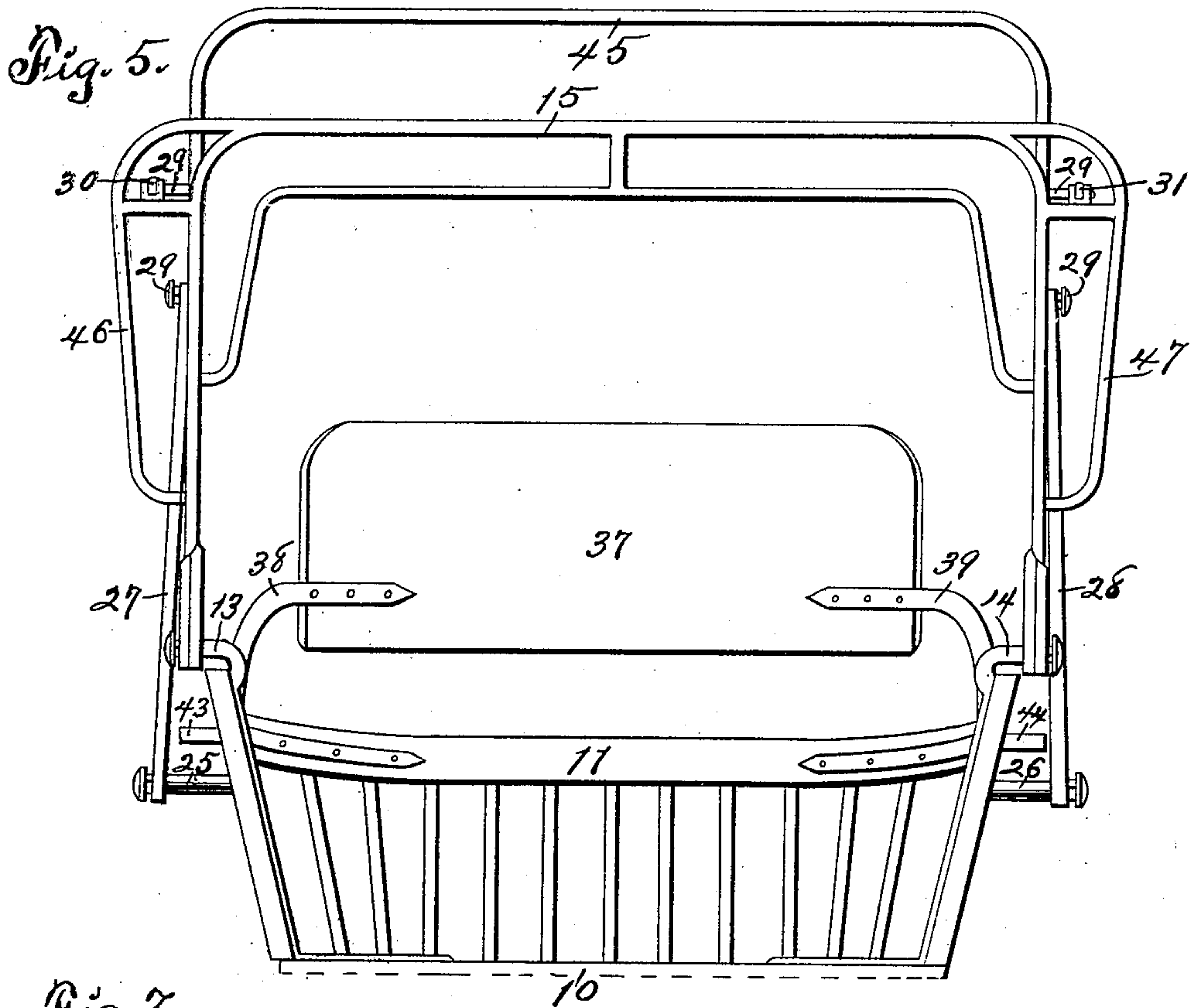
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4 Sheets—Sheet 2.



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No. 680,094.

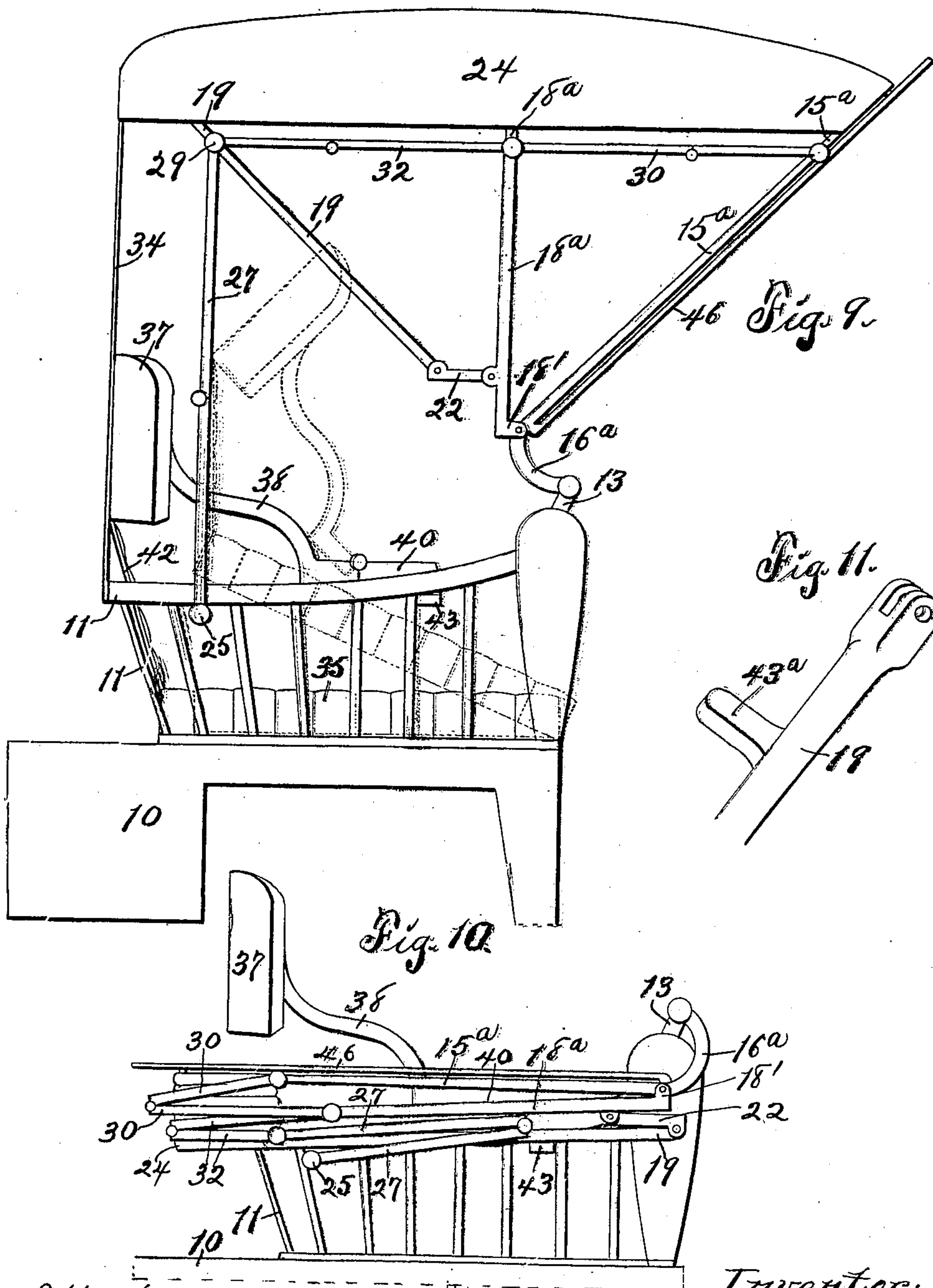
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4 Sheets—Sheet 3.



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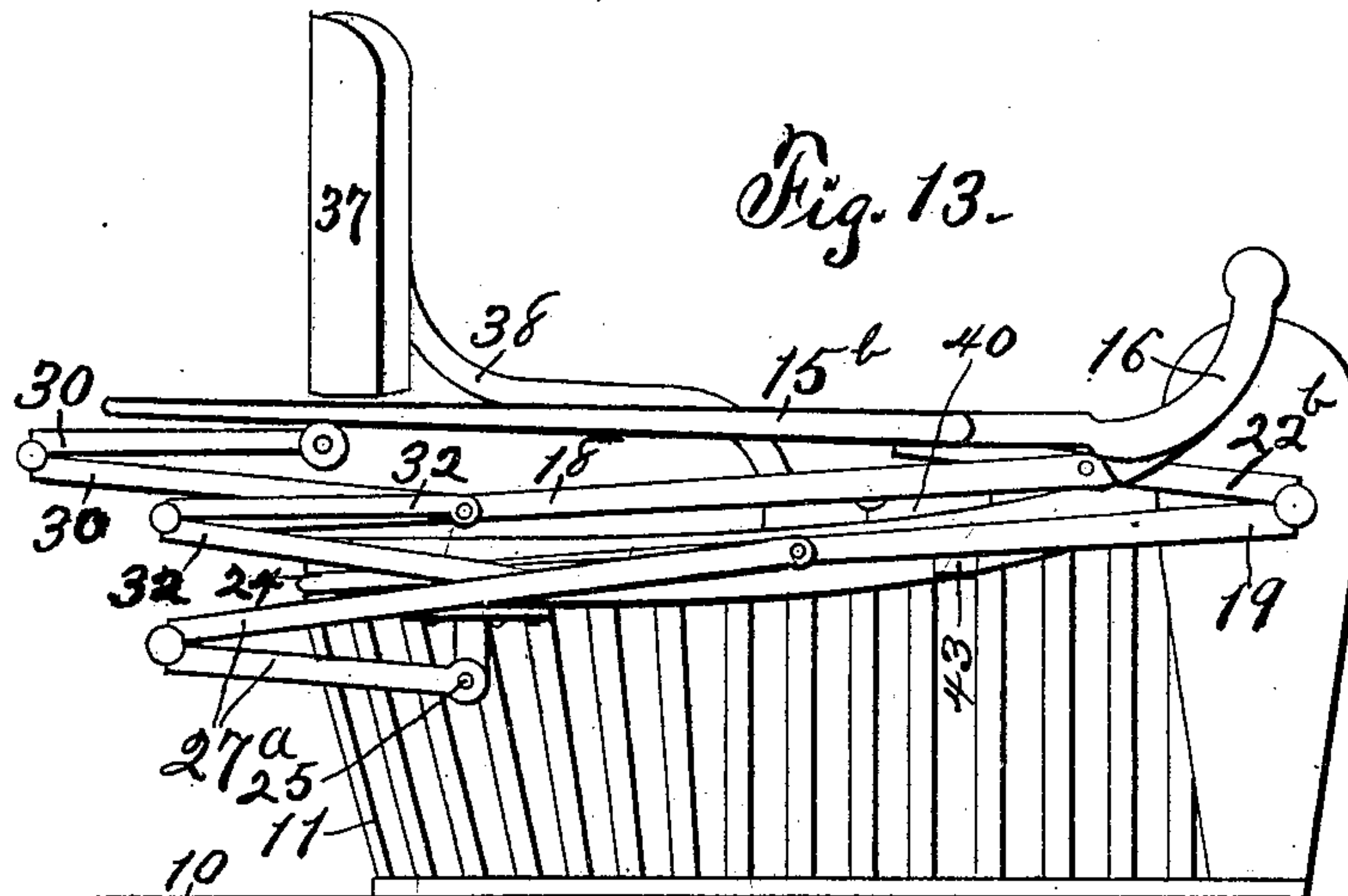
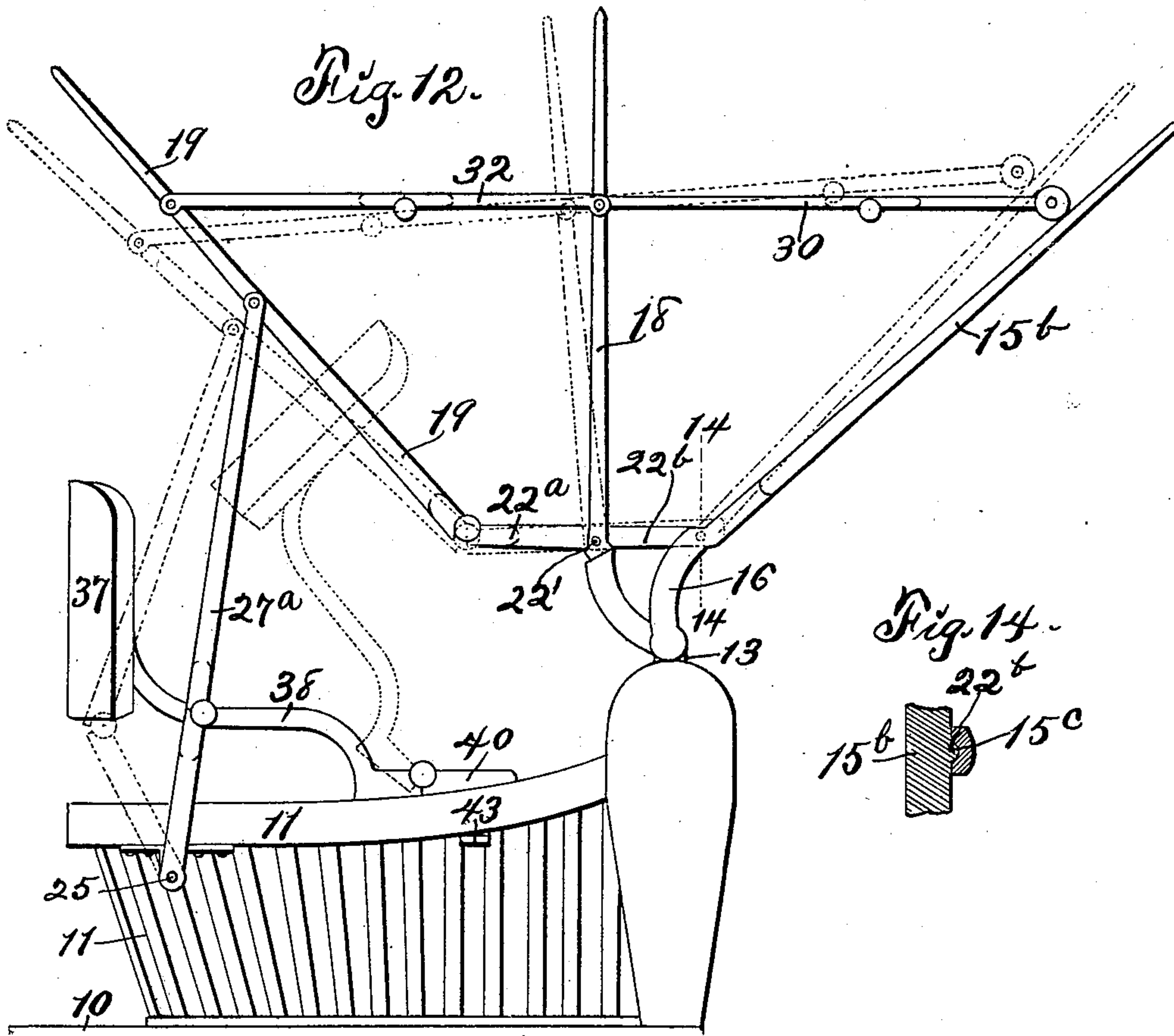
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(No Model.)

4 Sheets—Sheet 4.



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UNITED STATES PATENT OFFICE.

JESSE O. WELLS, OF DES MOINES, IOWA.

BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 680,094, dated August 6, 1901.

Application filed June 15, 1900. Serial No. 20,419. (No model.)

To all whom it may concern:

Be it known that I, JESSE O. WELLS, a citizen of the United States of America, and a resident of Des Moines, Polk county, Iowa, have invented certain new and useful Improvements in Buggy-Tops, of which the following is a specification.

The object of this invention is to provide means for so constructing and mounting a folding buggy-top as that said top when folded will be concealed to a maximum degree and be located adjacent to the seat-back.

A further object of my invention is to provide means whereby the seat-back may be moved out of the path of travel of the horizontal bows of the folding top during the operation of folding or extending said top.

A further object of my invention is to be found in the provision of means whereby a folding buggy-top may be swung below the horizontal plane of its axis of oscillation.

A further object of my invention is to provide means whereby a folding buggy-top may be folded into a compact space below its axis of oscillation and in the operation of folding be approximated to the seat-back.

A further object of my invention is to provide means for concealing the folded top to a maximum degree when said top is located below its axis of oscillation and with its horizontal bows in proximity to the seat-back.

A further object of my invention is to provide means for automatically approximating the side bows and braces or props of a folding buggy-top when the same is folded.

A further object of my invention is to provide means for moving the seat-back forwardly out of the path of travel of the horizontal bows of a folding buggy-top.

A further object of my invention is to provide a valance whereby the folded buggy-top is concealed to a maximum degree and made to serve as a fender above the rear wheels of the buggy.

My invention consists of the combination, with a buggy, carriage, or other vehicle, of a folding top mounted for oscillation on said vehicle and shaped and arranged to swing into a horizontal plane below the axis of oscillation thereof.

My invention consists, further, in the construction of a foldable buggy-top and its

mounting upon a vehicle, whereby said top may in the operation of folding assume a position below the horizontal plane of its axis of oscillation.

My invention consists, further, in the combination of a buggy, carriage, or other vehicle, abnormally-elevated finger-props on said buggy, carriage, or other vehicle, and a foldable buggy-top hinged at an abnormal elevation to said finger-props and arranged to swing during the operation of folding into and occupy a position below the horizontal plane of the axis of its hinge.

My invention consists, further, in the combination of a buggy, carriage, or other vehicle, a seat-back hinged thereto and normally occupying a position in the path of travel of the buggy-top and arranged and shaped to be swung or otherwise moved out of said path of travel, and a foldable buggy-top hinged to said buggy, carriage, or other vehicle at an unusual and abnormal elevation and shaped and arranged to be swung or otherwise moved into a position below the horizontal plane of its axis of oscillation and in proximity to and at the rear of the normal position of the seat-back.

My invention consists, further, in the construction of a foldable buggy-top wherein the front bow is provided with an extended valance across its top and laterally of the upper portion of its sides, whereby from front view the props, bows, and braces are concealed to a maximum degree, and when the top is folded the valance serves as a fender or guard over the rear wheels.

My invention consists, further, in the construction of a foldable buggy-top wherein the front bow is provided with an extended and flanged valance, whereby when the top is extended the bows and braces and props are concealed in front view, and when the top is folded the side bows, braces, and props are concealed to a maximum degree, and the valance serves as a fender or guard over the rear wheels.

My invention consists, further, in the combination of a seat-cushion, a back-cushion, and a hinged seat-back, whereby in the elevation of the seat-back to permit of the folding of the top the seat-cushion is raised by the back-cushion to permit of the folding of

the top-cover and rear curtains at the rear of the normal position of the seat-cushion and back-cushion.

My invention consists, further, in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective of a buggy, showing my invention applied, the top being folded and concealed to a maximum degree. Fig. 2 is a perspective of a buggy, showing my invention applied, the top being elevated approximately one-third of its maximum extension. Fig. 3 is a perspective showing my invention applied, the top being elevated approximately two-thirds of its maximum extension and the seat-back, back-cushion, and seat-cushion being elevated or swung forwardly to permit the orbital travel of the horizontal bows of the top. Fig. 4 is a perspective of a buggy, showing my invention applied and the top extended to its maximum degree. Fig. 5 is a front elevation of a skeleton buggy-top, seat, and seat-back, showing my invention applied thereto. Fig. 6 is a detail side elevation showing the positions assumed by the side bows, braces, and props relative to each other and to the abnormally-elevated finger-props. Figs. 7 and 8 are detail views illustrating modified forms of seat-back supports and means employed to hinge them to the buggy-body or seat-iron. Fig. 9 is a side elevation of portions of a buggy, showing my invention applied thereto in modified form, the top being extended to the maximum degree and the dotted lines indicating assumable positions of the seat-back, back-cushion, and seat-cushion where-
by the top is permitted to be folded or extended. Fig. 10 is a view of the device shown in Fig. 9, illustrating the top folded into a position below the horizontal plane of its axis of oscillation. Fig. 11 is a detail perspective of a portion of the rear bow and illustrates a modified construction for automatically approximating the bows and props to each other in desirable relations to the seat-arms. Fig. 12 is a side elevation of portions of a buggy, showing my invention applied thereto in further modified form, the dotted lines indicating assumable positions of the parts in the operation of folding the top. Fig. 13 is a side view of the elements shown in Fig. 12 and illustrates the top folded into a position below the axis of oscillation thereof. Fig. 14 is a detail vertical section on the indicated line 14-14 of Fig. 12.

Throughout the entire elucidation of this matter it may be well to bear in mind that ordinary buggy-tops are so shaped and arranged that when folded the horizontal bows thereof traverse the path of travel of the vehicle in a vertical plane materially and considerably to the rear of the seat-back of the vehicle and show horizontal creases and folds. In some forms of construction a curtain is

draped or stretched from the top of the seat-back to the rearmost bow for the purpose of shielding, covering, and concealing the space between the seat-back and bows and the folds of the buggy-top. By reason and through the medium of the constructions hereinafter described I am enabled to materially and considerably reduce the rearward projection of the horizontal bows relative to the seat-back and at the same time cover and conceal said bows to the maximum degree by elements inherent in the construction thereof and performing other useful functions. Thus I am enabled to fold the top close in to the seat-back and in a plane below the ordinary position of a buggy-top and into more compact form than usually it is possible to attain.

In the construction of the device, as shown, the numeral 10 designates a buggy-body provided with a seat-frame 11 and mounted upon a truck 12. The buggy-body, truck, and seat-frame may be of any desired and suitable construction and may vary in form, shape, and design to suit the taste of the manufacturer or user.

At the forward corners of the seat-frame are located finger posts or props 13 14, and the only distinctive feature or novelty of these finger-props is to be found in their unusual and abnormal elevation relative to the bottom of the buggy or to the plane of the buggy-seat. There is a desirable almost a determined relation between the horizontal plane of a buggy-seat and the elevation above said seat of the foldable buggy-top. I wish to maintain this relation and at the same time shorten the bows. Hence I extend the finger-props upwardly to an abnormal and unusual degree or extent.

A front bow 15 is provided and comprises a horizontal central portion and end portions approximately at right angles thereto. The extremities of the end portions of the front bow 15 are curved forwardly from the trend of the bow and extended a material distance, thus forming bow-fingers 16 17, which are shaped and arranged for pivotal connection to the finger-props 13 14. By reason of the curved relations of the bow-fingers 16 17 and the bow 15 I am enabled to swing the bow upwardly to the desired elevation and forwardly to the desired projection and at the same time obviate the disadvantage of the usual restriction of the entrance to the buggy, or, in other words, provide the maximum space between the dashboard and front bow. By reason of this same construction I am enabled to swing the front bow rearwardly and downwardly and forwardly in its lowermost position, thus locating the transverse central portion of the bow in close proximity to the seat-frame 11 and in a plane below the horizontal plane of the axis of oscillation of said bow.

A center bow 18 is provided and comprises a transverse central portion parallel with the central portion of the front bow 15 and end portions parallel with each other and ap-

proximately at right angles with the transverse portion. The extremities of the end portions of the center bow 18 are curved forwardly out of the trend of the bodies thereof and are pivotally connected to the finger-props 13 14 conjunctively with the bow-fingers 16 17. By reason of the curvature of the extremities of the center bow 18 I am enabled to hinge or pivot said bow upon the finger-props and at the same time locate the major portions of the end portions of said bow in vertical planes. Also, by reason of this construction I am enabled to swing the center bow 18 rearwardly and downwardly and forwardly in its lowermost position to the end of bringing the transverse portion of said bow into close proximity with the seat-frame 11 when the top is closed.

A rear bow 19 is provided and comprises a central transverse portion parallel with the center bow and spaced therefrom when the top is extended approximately the same distance as the spacing apart of the center bow and front bow and end portions approximately at right angles to the transverse portion. The extremities of the end portions of the bow 19 are jointed at 20 21 to props 22 23, and said props are in turn pivotally connected to the center bow 18 at points adjacent to the offset or initiation of curvature of the extremities of said center bow. The end portions of the rear bow 19 are located at angles to the center bow 18 when the top is extended and in planes diverging from the planes of the end portions of the front bow 15.

A covering 24 of suitable material is fixed to and connects the transverse portions and the upper ends of the end portions of the bows 15, 18, and 19.

Studs 25 26 are formed on or fixed to and extend laterally from the rear corners of the seat-frame 11, and jointed props or top-braces 27 28 are pivoted at their lower ends on said studs and at their upper ends on studs 29, projecting laterally from the rear bow 19. The top-braces or jointed props 27 28 are arranged to break forwardly, and the joints 20 21 between the rear bow 19 and the props 22 23 are so formed as to break rearwardly when the top collapses or folds. Jointed top-braces 30 31 are pivoted to and connect the front bow 15 and center bow 18, and jointed top-braces 32 33 are pivoted to and connect the center bow 18 and the studs 29 on the rear bow 19.

A curtain 34 is fixed to the rear edge of the cover 24 and depends therefrom and is fixed to the rear of the seat-frame 11 or some other portion of the buggy-body. The curtain 34 holds against the strain of the extended top-braces or props 27 28 and the cover 24 holds against the strain of the extended braces 30 31 32 33.

A cushion 35 is located on the seat of the buggy-body and may be provided with a front curtain or apron 36, depending in front of the seat. A seat-back 37 is provided and rigidly

connected at its ends to arms 38 39, which arms are hinged to clips 40 41, fixed to the end portions of the seat-frame. The arms 38 39 are formed with elbows so shaped and arranged as to rest on the upper surfaces of the ends of the seat-frame and limit and determine the rearward downward movement of the seat-back. The length of the arms 38 39 and the points of hinging thereof are so arranged intermediate of and relative to the curtain 34 and the finger-props 13 14 as that the seat-back may be swung forwardly and upwardly until said arms rest upon the finger-props. While the seat-back is in its forward position and the top in the position shown in Fig. 4 the top-braces 27 28 may be broken forwardly and the top let down or lowered rearwardly, as illustrated in Fig. 3. There is a back-cushion 42 connecting the lower edge of the seat-back 37 and the rear edge of the seat-cushion 35, and in the elevation and forward movement of the seat-back said back-cushion raises and moves forwardly the seat-cushion. Thus when the top is in the position illustrated in Fig. 3 the rear curtain 34 should be folded forwardly across the back of the seat-frame 11 and the central portion thereof will depend in front of said seat-frame. The top-braces 32 33 should now be broken upwardly and the cover creased between the center bow and rear bow and crowded inwardly. The center bow and rear bow may now be approximated into close relation with each other and the top-braces 32 33 folded upon the braces 27 28. The seat-back may now be moved rearwardly and carries with it the back-cushion 42 and seat-cushion 35, thus producing a buggy of the appearance illustrated in Fig. 2, wherein the top is elevated one-third. Many users favor the form of top and its position as shown in Fig. 2, and it may be employed in this manner whenever desired. To completely fold the top, the braces 30 31 should be broken rearwardly and the cover 24 creased and folded inwardly between the front bow 15 and center bow 18. The front bow and center bow may now be approximated closely to each other and the braces 30 31 folded within or between the braces 32 33. In the making of the last fold the seat-back should be thrown forwardly in order that the crease or inwardly-folded portions of the cover 24 may be packed and arranged on and depending in front of the rear and rear corner portions of the seat-frame and in position to be packed and pressed upon by the seat-back when said seat-back is repositioned for use. The top is now in position shown in Fig. 1 and in reaching such position has been drawn forwardly in its lowermost plane by reason of the peculiar curvature of the bow-fingers 16 17, employed in conjunction with the abnormally-elevated finger-props.

In lowering or folding the buggy-top it is desirable that the bows, braces, and jointed props be closely approximated to each other,

and to this end I employ studs 43 44, formed on or fixed to and projecting laterally from the end portions of the seat-frame 11. The arms or studs 43 44 are extended into the vertical plane of the rear bow 19, and when the top is folded said rear bow engages said studs and receives and sustains approximately the entire weight of the top. Inasmuch as the studs 43 44 limit and determine the further downward movement of the rear bow 19 and said rear bow receives and sustains the remainder of the bows, braces, and props, it follows that pressure applied to the front bow downwardly will compactly approximate the side portions of the bows, props, and braces into the relations most clearly illustrated in Fig. 6.

It is desirable to form an ornamentation or relief for the front of the top of the buggy, and to this end I have provided valance-frames 45, 46, and 47, fixed to, rising from, and extending laterally of the front bow 15, and the valance-frames 46 47 are further provided with flange-frames 48 49 at right angles thereto and at right angles to the trend of the bow 15. The valance-frames and front bow, as well as the flange-frames, are provided with coverings 50, of suitable material, preferably of the style and character employed for the cover 24. The valance-frames and their coverings not only serve as an ornamentation or relief for the front of the buggy-top and conceal the bows and props to a maximum degree from front view, but in addition thereto when the top is folded, as illustrated in Fig. 1, they serve the added purposes of fenders for the rear wheels and curtains, protectors, or concealers for the side props, braces, and bows. That portion of the valance supported by the frame 45 also serves as a shelf or projection, seemingly an ornamental border and extension of the seat-frame, and adds materially to the optical illusion that the top is not a top. While for practical purposes the valance and its flanges are employed to conceal the bows, props, and braces and effect this purpose optically, yet they are vizors, ornaments, and reliefs for the superstructure when extended.

In Fig. 7 I have illustrated the seat-back 37^a, supported by arms 38^a, which arms are hinged at their lower ends to clips 40^a, fixed to the seat-frame 11^a. The arms 38^a extend downwardly and forwardly from the lower edge of the seat-back 37^a and rest when in use against the forward face of the rear upper bar of the seat-frame and may be swung forwardly to permit of the proper operations of the top in folding and extending. The arms 38^a also are formed with lugs 38', extending rearwardly from their lower end portions and shaped and arranged for engagement with the upper surface of the top rail of the seat-frame and provide auxiliary support for the seat-back, whereby the rearward movement of said seat-back is limited and determined.

In Fig. 8 I show the seat-back 37^b supported by arms 38^b, which arms are hinged at their lower ends to clips 40^b, mounted on the seat-frame 11^b. The upper end portions of the arms 38^b are attached to the ends of the seat-back 37^b and are further secured thereto by braces or struts 38''. The rearward movement of the arms 38^b is limited and determined by engagement of the central portions of said arms with studs 38''', fixed to and extending inwardly from the end portions of the upper rail of the seat-frame 11^b, as shown by dotted lines in Fig. 8.

In Figs. 9 and 10 I have illustrated some modifications of construction of the buggy-top, as follows: The front bow 15^a is provided with bow-fingers 16^a, one only of which is shown, curved more sharply or abruptly from the bow and pivoted at their extremities on the finger-props 13. By reason of the sharper or more abrupt curvature of the bow-fingers relative to the bow provision is made for drawing the top in slightly nearer to the seat-back when it is folded, and at the same time when the top is folded the bow-fingers 16^a serve as handles, loops, or handholds and serve to assist the passenger in mounting to or alighting from the buggy. In this construction the center bow 18^a is shortened somewhat and provided at its extremities with short bow-fingers 18', turned abruptly at right angles to the bow and pivoted to the front bow 15^a at the points of demarcation between said front bow and the bow-fingers 16^a. In other respects the construction illustrated in Figs. 9 and 10 is substantially identical with the construction hereinbefore described in respect of Figs. 1 to 6, inclusive.

It sometimes occurs that the use of the studs 43 44 on the seat-frame 11 for engagement by the back bow 19 is objectionable, and hence I have provided for the elimination of said studs and the establishment of the same functions in studs 43^a, formed on and extending inwardly from the end portions of the back bow 19', as illustrated in detail in Fig. 11. In the folding of a buggy-top constructed according to the details illustrated in Fig. 11 the studs 43^a will engage the end portions of the top rail of the seat-frame 11 and limit and determine the further downward movement of the bows, braces, and props and closely pack the same in a minimum space at the sides of the buggy.

In Figs. 12, 13, and 14 I have illustrated some modifications of construction of the buggy-top, as follows: The front bow 15^b is constructed and pivoted in all essential particulars the same as the bow 15 first described, and the bow 18 is pivoted conjunctively with the front bow on the finger-props 13 14. A stud 15^c is formed on and projects inwardly from each end portion of the bow 15^b at the points of juncture of said bow to the bow-fingers 16 17. The short prop 22^a is fulcrumed at its center on a pin 22', seated in each end portion of the bow 18 at the points of junc-

ture between said bow and the curved extremities or bow-fingers thereof. The rear ends of the short props 22^a are hinged to the forward ends of the rear bow 19, and the forward ends of said short props extend across the normal planes of the end portions of the front bow 15^b and are provided with seats, notches, concavities, or depressions arranged and so shaped as to receive and retain normally the studs 15^c on the front bow. The props 22^a spring or yield slightly transversely to cross and receive the studs 15^c. By reason of this construction a further and more rigid connection is made between the front bow 15^b and the center bow 18 and greater stability is given to the rear bow 19. A further distinction of construction is found in the attachment of the upper end portions of the top braces 27^a 27^a, one only of which is shown, to the central portions of the ends or vertical parts of the rear bow 19 rather than conjunctively with the top braces 32 33. In the connection of the top braces 27^a 27^a, intermediate of the studs 29 and the points of hinging of the rear bow 19 to the props 22^a 23^a, said top braces are brought or positioned farther forward than is illustrated in Figs. 1 to 6, inclusive, and such positioning may be objectionable at times, inasmuch as it will limit to some extent the elbow room of the driver. This objection would be overcome in the construction illustrated in the other figures of the drawings. Fig. 12 also gives in dotted lines a very clear idea of the initial movements of folding of the top and should be considered in connection with the description of the operation of folding hereinbefore set forth.

The valance-frames and their trimmings may be so shaped and constructed as to be removably and replaceably attached to the front bow of the buggy-top. The upper valance-frame 45 may be hinged to the bow on which it is carried in order that it may be dropped at the rear of the top when said top is folded and conceal said top to a maximum degree.

I claim as my invention—

1. The combination of a buggy, a foldable top pivoted thereon and a seat-back hinged to said buggy and arranged to be moved in an arc out of the orbit of travel of the foldable top.

2. The combination of a buggy, a foldable top pivoted thereto, a seat-back mounted on said buggy in the orbit of travel of said top and shaped and arranged for movement out of said orbit of travel at times.

3. The combination of a buggy, a foldable top pivoted thereto, a seat-back mounted on the buggy and arranged and so shaped as to be swung out of the way of the foldable top in the folding or expanding of said top.

4. The combination of a buggy, a foldable top mounted for oscillation thereon and susceptible of location, when folded, below the horizontal plane of its axis of oscillation and a seat-back mounted on said buggy and ar-

ranged and so shaped as to be moved out of the path of oscillation of said foldable top.

5. The combination of a buggy, a foldable top thereon and arranged and so shaped as to occupy, when folded, a position below its axis of oscillation, and stops on the buggy arranged for engagement by the top, whereby said top is compactly folded.

6. The combination of the buggy provided with abnormally-elevated finger-props, the foldable buggy-top provided with curved bow-fingers pivoted to the abnormally-elevated finger-props, the seat-back arranged to be moved out of the way of the buggy-top and means for compactly folding said top.

7. The combination of the buggy, the finger-props thereon and elevated abnormally relative to the seat thereof, the seat-back mounted on the buggy and arranged for movement in an arc, the front bow pivoted on the finger-props, the center bow pivoted on the front bow, the rear bow jointed to the center bow and further flexibly connected with the center bow, the jointed top-braces flexibly connecting the buggy and rear bow, the stops for compactly folding the bows and the valance carried by the front bow.

8. The combination of the buggy, the finger-props thereon and elevated abnormally relative to the seat thereof, the seat-back mounted on the buggy and arranged for movement in an arc, the front bow pivoted on the finger-props, the center bow pivoted on the front bow and further flexibly connected therewith, the rear bow jointed to the center bow at its ends and further flexibly connected therewith and the top-braces connecting the buggy and rear bow.

9. The combination of the buggy, the finger-props thereon and elevated abnormally relative to the seat thereof, the seat-back mounted on the buggy and arranged for movement in an arc, the front bow pivoted on the finger-props, the center bow pivoted on the finger-props and flexibly connected with the front bow, the rear bow jointed at its ends to the center bow and further flexibly connected therewith, the jointed top-braces flexibly connecting the buggy and rear bow, the cover for the bows, the rear curtain connecting the rear of the cover to the rear of the buggy, the seat-cushion and the back-cushion connecting the seat-cushion and seat-back whereby in the movement of the seat-back the seat-cushion is elevated.

10. The combination of the buggy, the finger-props thereon and elevated abnormally relative to the seat thereof, the seat-back mounted on the buggy and arranged for movement in an arc, the front bow pivoted on the finger-props, the center bow pivoted on the finger-props and flexibly connected with the front bow, the rear bow jointed at its ends to the center bow and further flexibly connected therewith, the jointed top-braces flexibly con-

necting the buggy and rear bow, the cover for the bows, the rear curtain connecting the rear of the cover to the rear of the buggy, the seat-cushion the back-cushion connecting the seat-cushion and the seat-back, whereby in the movement of the seat-back the seat-cushion is elevated, and the valance carried by the front bow and projecting laterally therefrom outwardly.

10 11. The combination of the buggy, the finger-props thereon and elevated abnormally relative to the seat thereof, the seat-back mounted movably on the buggy, the front bow formed with curved bow-fingers pivoted
15 on the finger-props, the center bow pivoted on the front bow and further flexibly connected therewith, the rear bow jointed at its ends to the center bow and further flexibly connected therewith, the jointed top-braces
20 flexibly connecting the buggy and the rear bow, the cover for the bows, the rear curtain connecting the rear of the cover to the rear of the buggy, the seat-cushion, the back-cushion connecting the seat-back and seat-
25 cushion, whereby in the movement of the seat-back the seat-cushion is elevated, the stops whereby the bows are compactly folded and the valance carried by the front bow.

12. The combination of the buggy, the finger-props thereon and elevated abnormally relative to the seat thereof, the seat-back mounted movably on the buggy, the front bow pivoted on the finger-props, the center bow pivoted on the finger-props and flexibly
35 connected with the front bow, the rear bow jointed at its ends to the center bow and further flexibly connected therewith, the jointed top-braces flexibly connecting the buggy and rear bow, the cover for the bows, the rear
40 curtain connecting the rear of the cover to the rear of the buggy, the seat-cushion, the

back-cushion connecting the seat-cushion and seat-back, whereby in the movement of the seat-back the seat-cushion is elevated, the stops whereby the bows are compactly folded and the valance carried by the front bow.

13. The combination of the buggy, the finger-props thereon and abnormally elevated relative to the seat thereof, the front bow
50 formed with abruptly-curved bow-fingers pivoted to said finger-props and arranged to serve as handholds or loops when the top is folded, the center bow pivoted to the finger-props, the jointed brace connecting the upper portions of the front and center bows, the
55 short props fulcrumed on the lower portions of the center bow and detachably connected at their forward ends to the front bow, the rear bow pivoted at its ends on the rear ends
60 of the short props, the jointed braces connecting the upper portions of the rear bow and center bow, the jointed braces connecting the rear bow and buggy, the cover for the bows, the seat-back arranged for movement
65 in an arc and the stops on the buggy arranged for engagement by the rear bow whereby the buggy-top may be compactly folded.

14. In a foldable buggy-top the combination of the front bow, the center bow, the rear
70 bow, the short props fulcrumed on the center bow, detachably connected with the front bow and pivotally carrying the rear bow and the jointed braces connecting said bows and connecting the rear bow to a buggy on which the
75 top is mounted.

Signed at Des Moines, Iowa, this 7th day of June, 1900.

JESSE O. WELLS.

Witnesses:

WEBSTER BISHOP,
S. C. SWEET.