

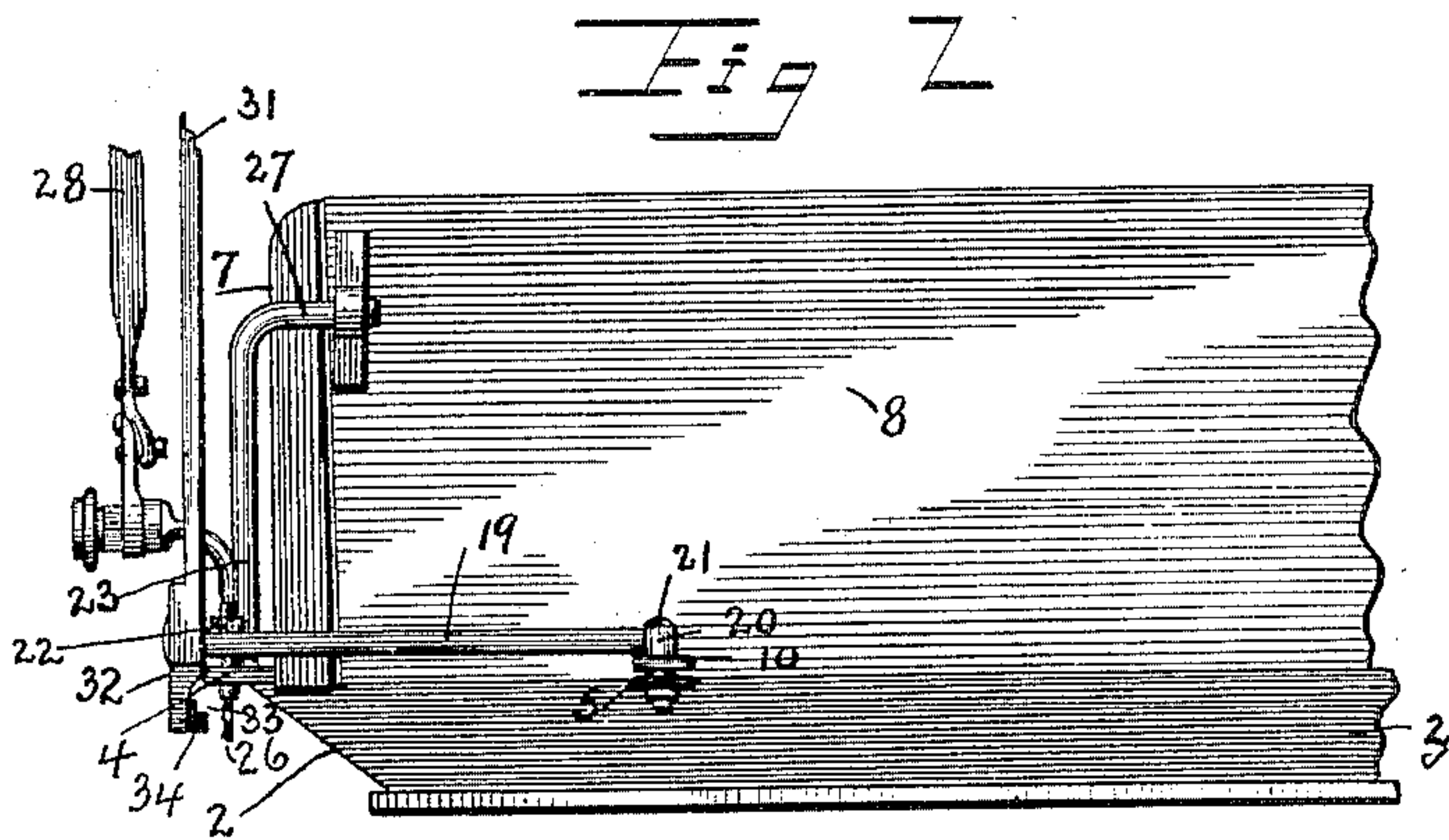
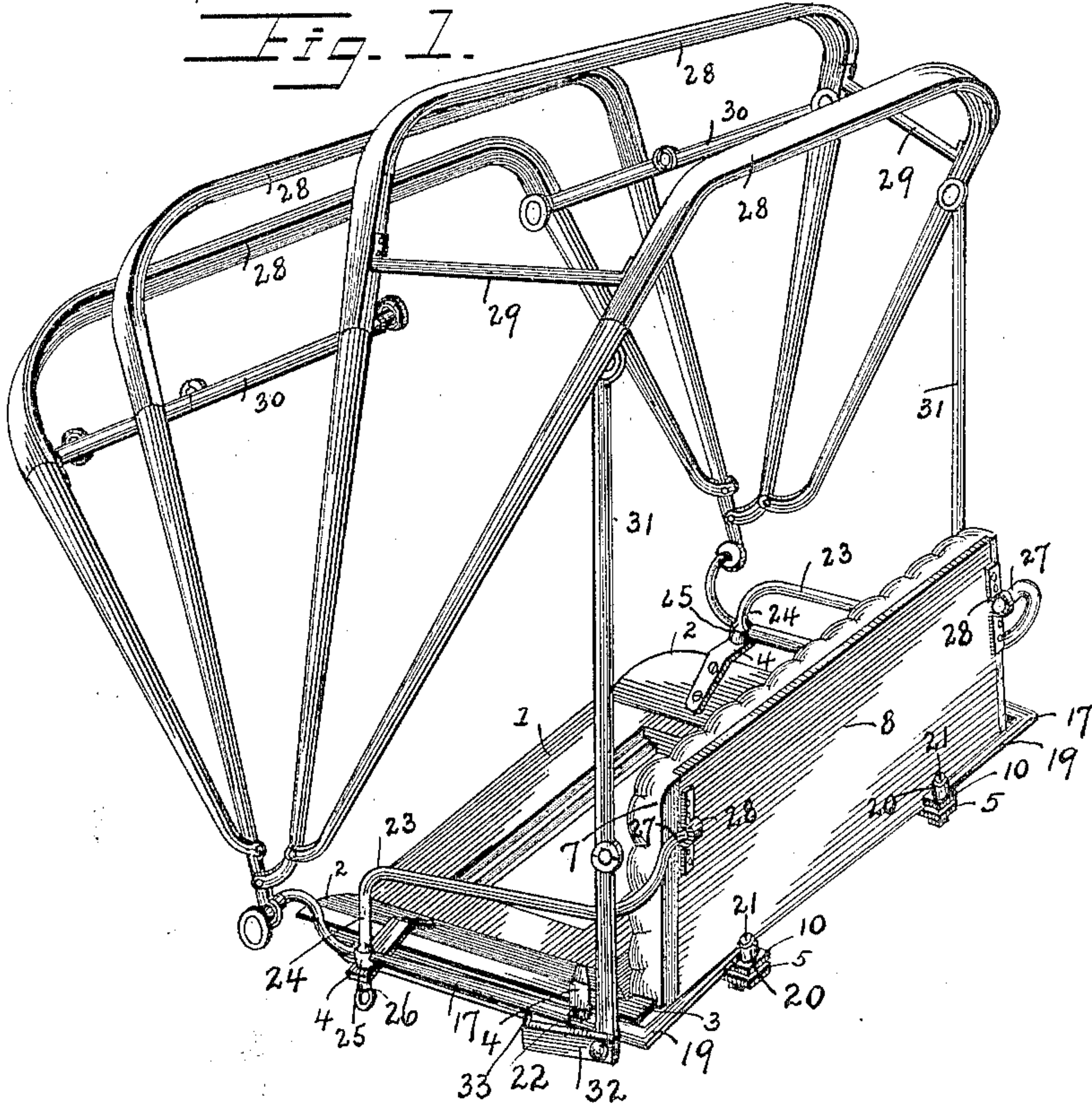
(No Model.)

2 Sheets—Sheet 1.

W. H. MAKUTCHAN.
BUGGY.

No. 599,298.

Patented Feb. 15, 1898.



William H. Makutchan, Inventor

Witnesses

C. J. Young.
Edwin Chase.

By His Attorneys,

C. A. Snow & Co.

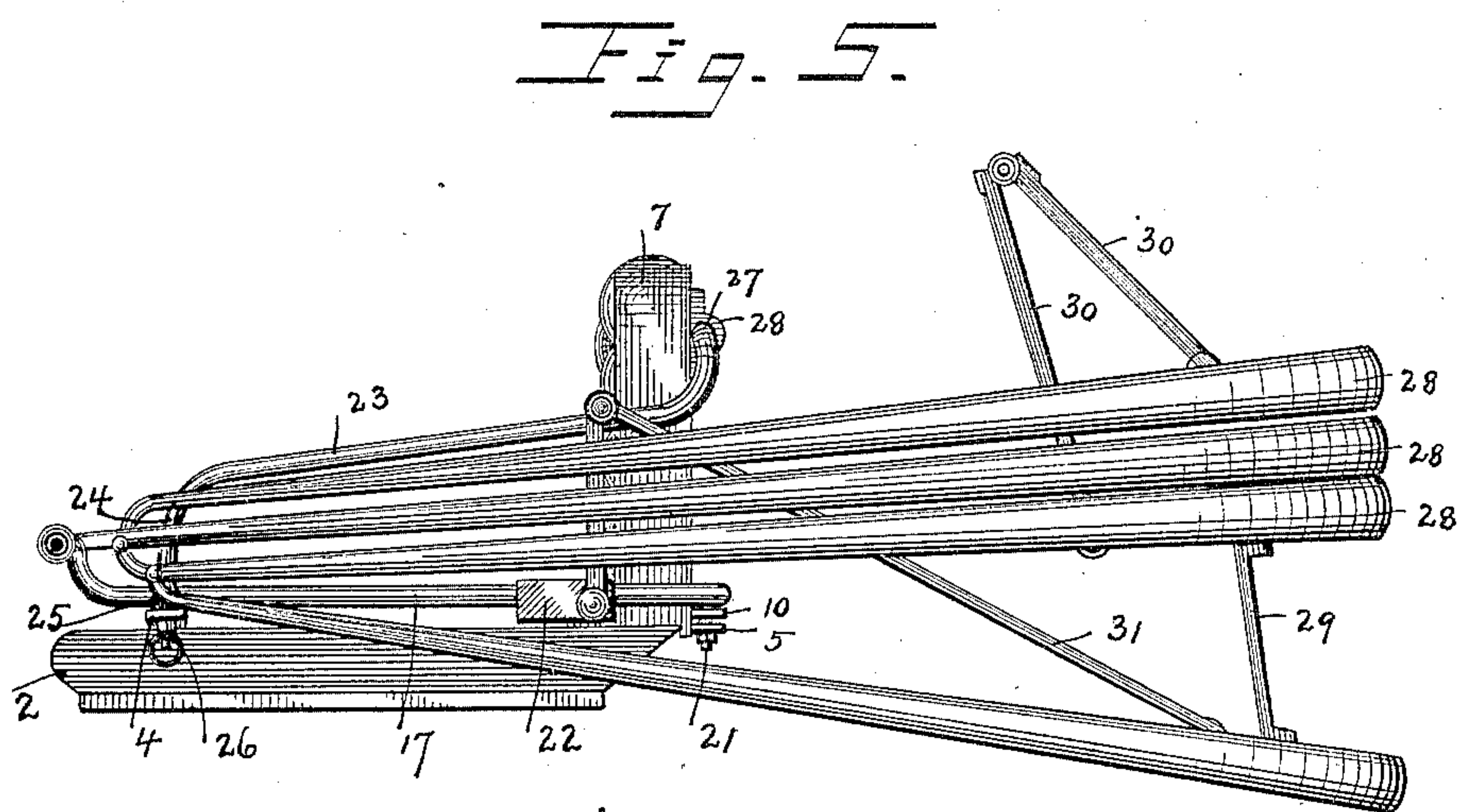
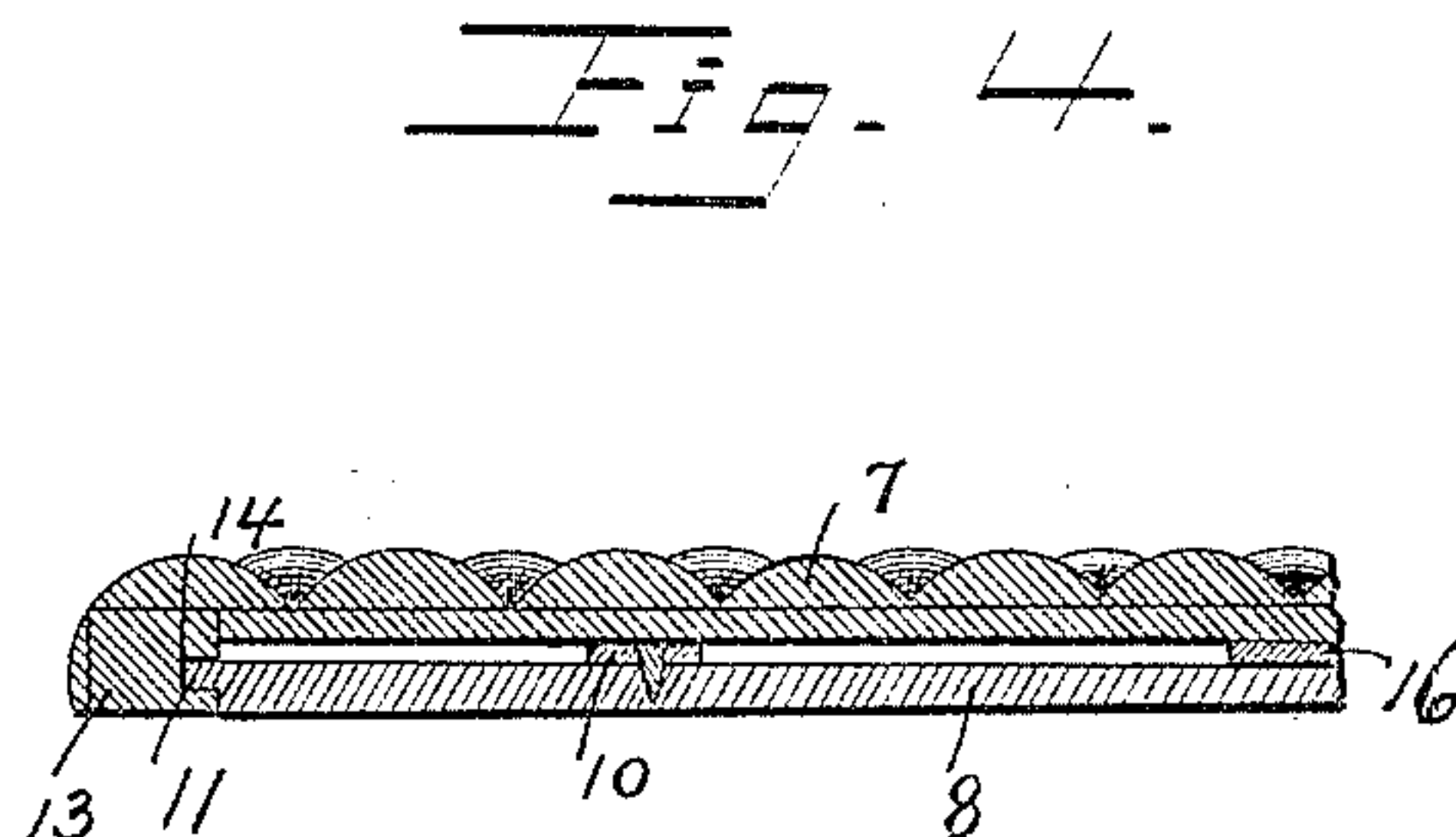
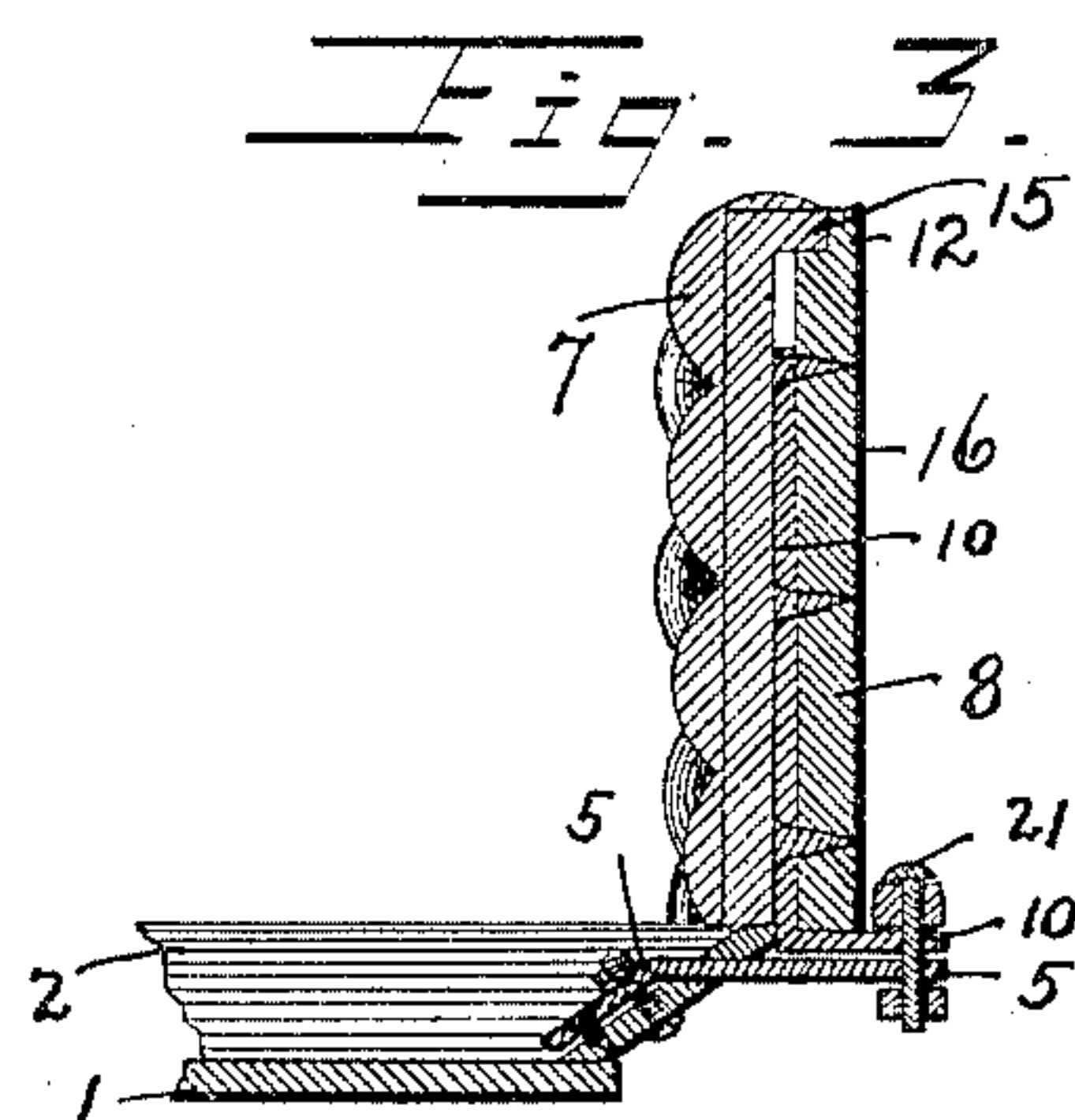
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UNITED STATES PATENT OFFICE.

WILLIAM H. MAKUTCHAN, OF PRINCETON, ILLINOIS, ASSIGNOR OF ONE-HALF TO H. E. MAKUTCHAN, OF SAME PLACE.

BUGGY.

SPECIFICATION forming part of Letters Patent No. 599,298, dated February 15, 1898.

Application filed July 15, 1897. Serial No. 644,715. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. MAKUTCHAN, a citizen of the United States, residing at Princeton, in the county of Bureau and State of Illinois, have invented a new and useful Buggy, of which the following is a specification.

This invention relates to buggies, its objects being, first, to provide a lazy-back which may be easily attached to or detached from a buggy and which back is made in two sections, one of which is firmly secured to the buggy-seat, and the other section slidably connected to the fixed section in order that it may be removed at pleasure, and, second, to provide certain improvements in the buggy-top by means of which it may be lowered from the inside of the buggy.

With these objects in view the invention consists of the several details of construction and combination of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a buggy top and seat made in accordance with my invention. Fig. 2 is a rear elevation of a portion of the seat and the shifting rail, the top-props and side brace being broken away. Fig. 3 is a vertical section through the lazy-back and the seat-back. Fig. 4 is a horizontal section of an end portion of the lazy-back. Fig. 5 is a side elevation showing the buggy-top in its lowered position.

Similar reference-numerals indicate similar parts in the several figures.

1 indicates the buggy-seat, having the usual side pieces 2 and the back piece 3, which incline downwardly and inwardly. To each side piece are secured two brackets, (indicated by 4,) and to the back piece are secured two similar brackets, (indicated by 5.) The horizontal member of each of these brackets projects outwardly beyond the side and back pieces.

The lazy-back is made in two sections, the front section being indicated by 7 and the rear section by 8. The lazy-back tapers at each end from its lower to its upper edge. The lower edge of the rear section 8 is rabbeted to form a seat for the upper edge of the back piece 3 of the buggy-seat, and to this

rear section are secured angle-irons 10, the vertical arms of which are secured to the inner face of the section, and the horizontal arms of which are supported on the horizontal parts of the brackets 5 and are secured thereto in a manner to be described hereinafter. Each end of the section 8 is provided with a tongue 11 and the upper edge of this section is rabbeted, as indicated at 12.

The front section 7 is provided at each end with vertical posts 13, which project out from what will be termed the "inner face" of the section, and these vertical posts are provided with grooves 14 to receive the tongues 11 on the ends of the section 8. A bead 15 is also formed on the upper edge of the section 7, which will fit in the rabbet 12 in the section 8. When the two parts are in position, the front face and the ends of the section 8 will be inclosed by the section 7 and the rear face of the posts 13 will be flush with the rear face of the section 8. Thin strips (indicated by 16) are secured to the inner face of the section 7 and are equal in thickness to the vertical arms of the angle-irons 10, and when the parts are in position these strips will engage the inner face of the section 8. As the tongues 11 and grooves 14 are formed on a bevel the two sections will fit snugly together and rattling will be prevented. The section 7 will be upholstered and the upholstery will hide all joints between the two sections, and as the section 7 can be quickly detached from the section 8 the upholstered part of the lazy-back can be stored away when not required for use and be thus better protected from dirt and injury. In case any repairs to or renewal of the upholstery should be necessary it can be much more easily accomplished by having the section 7 removable.

17 indicates the shifting rails, each being provided at its front end with a horizontal journal, on which the top is pivoted. The rear end of each rail is bent at a right angle to form an arm 19, which is provided at its end with a perforated boss 20. The perforated bosses of the respective arms rest upon the upper faces of the horizontal arms 7 of the angle-irons 10, and a bolt 21 passes through the perforated boss and perforations in the horizontal arm of the angle-iron and the hori-

zontal member of the bracket and secure the three parts firmly together. The shifting rails are respectively supported on the horizontal arms of the brackets 4, and the rail is
5 secured to the rear bracket 4 by means of a bolt 22.

23 indicates the arm-pieces, the front ends of which are bent downwardly to form the vertical portions 24, which extend through
10 openings in the shifting rails and the front brackets 4. Each vertical portion is provided with a collar 25, which engages the upper face of the shifting rail, and the end of the vertical part 24 is threaded for the reception
15 of a nut 26. The arm-pieces are curved upwardly at their rear ends and then bent at a right angle to form horizontal arms 27, the ends of which are screw-threaded and secured in bosses 28, firmly secured to the rear face
20 of the section 8 of the lazy-back near its upper edge. Each arm-piece, therefore, serves the double purpose of a brace for the lazy-back and also to secure the shifting rail to the brackets on the side pieces of the buggy-
25 seat.

The bows of the buggy-top are indicated by 28, and the rear bow is connected to the one adjacent to it by the rigid braces 29, and the front bow is connected to the one adjacent to
30 the rear bow by the horizontal folding braces 30. These horizontal braces are arranged on the inside of the bows in order that they may be operated from the inside of the buggy. The side-folding braces are indicated by 31,
35 and these braces are pivoted at their upper ends to the rear bow on the inside and at their lower ends to the shifting rails 17. The lower section of each side brace is provided with an arm 32, extending at a right angle,
40 and the front ends of these arms are bent inwardly, as indicated by 33, to project under the shifting rail 17. The ends of these intumed arms are notched, as indicated at 34, in order to engage both the under surface of
45 the shifting rail and its outer face.

In order to lower the top, the joints of the side braces 31 are broken in the usual manner and the top will then swing backwardly and downwardly, and the lower sections of
50 the braces 31 will first rock forwardly and then backwardly until the intumed ends 33 of the arms 32 engage the shifting rails and further downward movement of the top will be prevented. The top will be firmly supported in
55 its lowered position by the braces, the upper sections of which will form supporting-rods to transfer the strain to the upper ends of the lower sections, which will tend to rock the latter on their pivotal connection to the shifting rails and force the intumed ends of the
60 arm 32 against the shifting rails. A downward strain will thus be exerted on the shifting rail by the pivot of the lower section of the brace and an upward strain by the arms
65 32, and these opposing strains will relieve, in a great measure, the strain on the connection between the shifting rails and the buggy-seat.

The top can also swing lower than when the top is supported by pins projecting out from the buggy-seat, as is usually the case, and
70 there will be much less strain on the joints between the bows and the shifting rails.

By having the side and horizontal braces on the inside and connecting the side brace to the rear bow the tops can be made wider
75 and the side curtains can be attached or detached from the inside.

From the foregoing description it will be seen that the lazy-back and the top can be entirely removed together from the buggy and
80 also that the top may be separately removed and the lazy-back be left in position on the buggy.

It will be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what I claim is—

1. In a buggy, the combination with the shifting rails firmly secured to the seat, and the top bows pivotally connected to the shifting rails, of the folding side braces pivoted at their lower ends to the shifting rails and at
95 their upper ends to the inner face of the rear bow, arms projecting forwardly from the lower ends of the side braces and having intumed ends to engage the lower faces of the shifting rails, substantially as described.

2. In a buggy, the combination with the shifting rails firmly secured to the seat and having outwardly-extending horizontal journals at their front ends, top bows pivoted at their lower ends on said journals, rigid braces
105 connecting the upper portions of the rear bow and the bow adjacent to it, and horizontal folding braces pivotally connected to the upper portions of the front bow and the bow adjacent to the rear bow, of folding side braces
110 pivoted at their lower ends to the shifting rails near their rear ends, and at their upper ends to the inner face of the rear bow, arms projecting forwardly at an angle from the lower ends of the side braces, and intumed ends to
115 engage the lower faces of the shifting rails, substantially as described.

3. In a buggy, the combination with the shifting rails firmly secured to the seat, and the top bows pivotally connected to the front
120 ends of the shifting rails, folding side braces pivoted at their lower ends to the shifting rails near the rear ends of the latter and at their upper ends to the inner face of the rear bow, and folding horizontal braces pivotally connected to the inner faces of the top bows, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. MAKUTCHAN.

Witnesses:

W. A. VAN SCHAICK,
H. E. MAKUTCHAN.