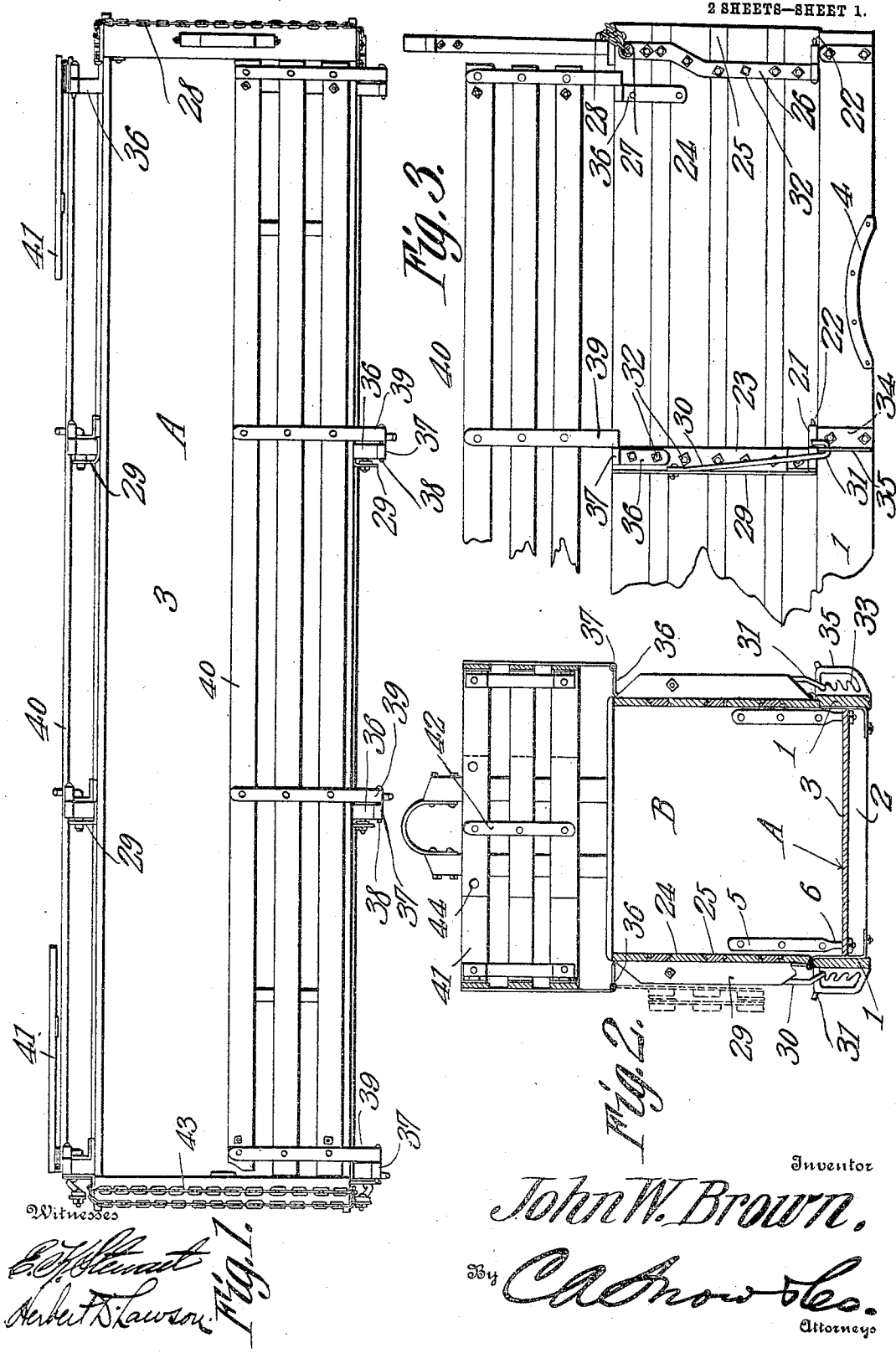
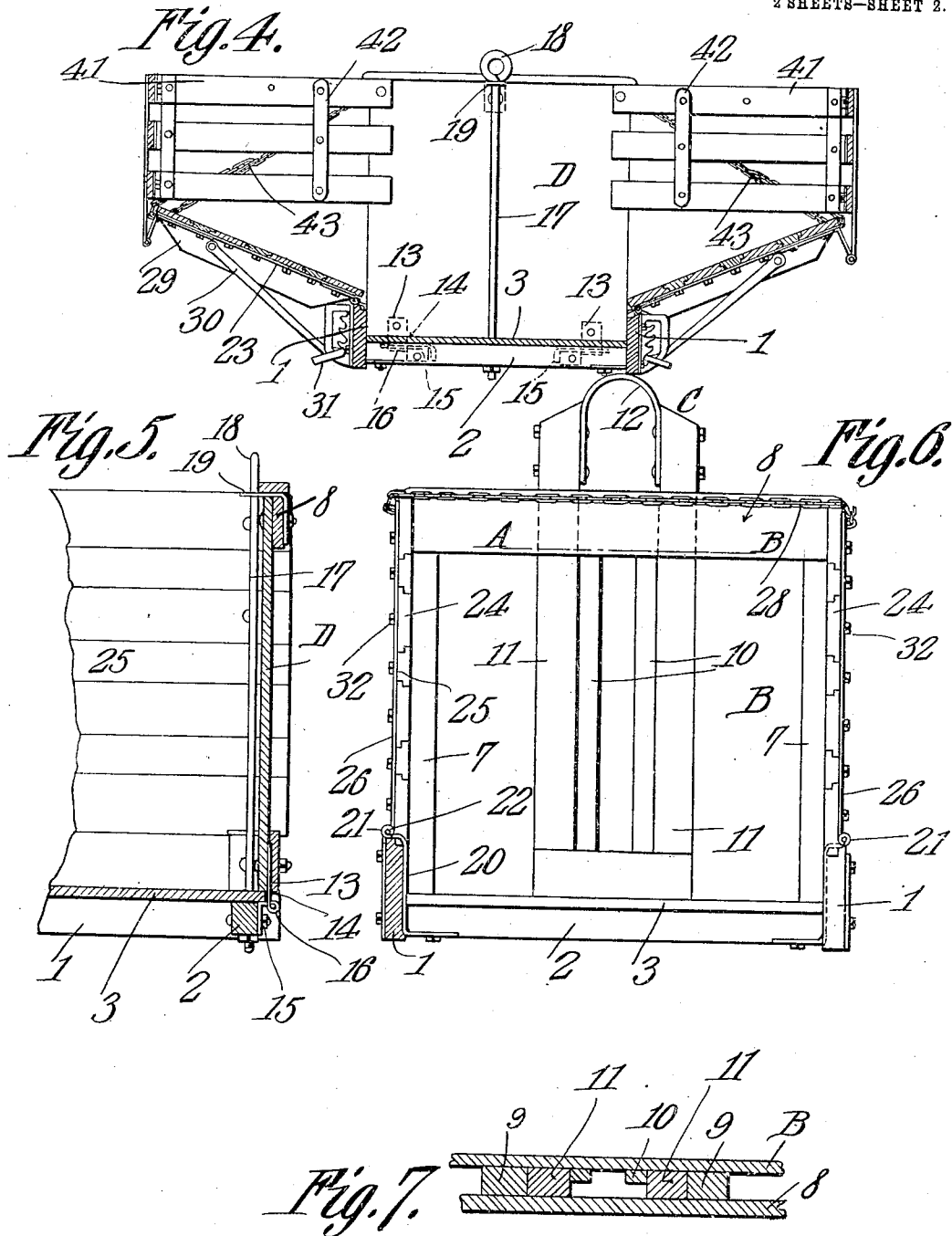






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UNITED STATES PATENT OFFICE.

JOHN W. BROWN, OF NAPPANEE, INDIANA.

ADJUSTABLE WAGON-RACK.

960,069.

Specification of Letters Patent. Patented May 31, 1910.

Application filed October 12, 1908. Serial No. 457,363.

To all whom it may concern:

Be it known that I, JOHN W. BROWN, a citizen of the United States, residing at Nappanee, in the county of Elkhart and State of Indiana, have invented a new and useful Adjustable Wagon-Rack, of which the following is a specification.

This invention relates to wagons of that type particularly designed for use by farmers and its object is to provide a device of this character which can be readily converted into a vehicle having a tight or an open bed capable of being adjusted so as to form either a tight box or an open box.

Another object of the invention is to provide a wagon body the side walls or panels of which may be adjusted and held at predetermined angles to the bottom of the body, the holding means being strong and durable and easily manipulated.

Another object is to provide auxiliary wings or panels for use in connection with the vehicle body, said wings being designed to be used either as extensions for the side panels when in raised or lowered position, or as tops for the wagon body when the same is closed to form a tight box.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a plan view of the wagon body, one of the wings being shown in position to constitute a portion of the top of a tight box, the other wing being disclosed suspended out of operative position. Fig. 2 is a transverse section through the wagon body and showing both wings elevated to constitute extensions of the walls of the body when positioned to constitute a tight box, one of the wings being shown, in dotted lines, suspended out of operative position. Fig. 3 is a side elevation of the front portion of the wagon body and showing the wings positioned as indicated in Fig. 2. Fig. 4 is a transverse section through the wagon body and showing the side walls supported in inclined positions to form an open box, the wings being arranged upon these side walls or panels to constitute extensions thereof. Fig. 5 is a central vertical section through the rear portion of the wagon body. Fig. 6

is a front elevation of the wagon body, one of the sills being shown in section. Fig. 7 is a section on line A—B Fig. 6.

Referring to the figures by characters of reference "A" designates the bottom or bed of the wagon body, the same consisting of longitudinal side sills 1, 1, connected by transverse sills 2 on which the floor 3 is secured. The side sills have their lower portions recessed or cut away adjacent their front ends as indicated at 4, so that the front wheels of the wagon can move thereunder and thus permit short turns to be made.

The front wall "B" of the wagon body has straps 5 secured to the side portions thereof and extending downwardly, each strap terminating at its lower end in a screw threaded stem 6, which projects through the bottom "A" of the wagon body and is engaged by a nut or other securing device whereby the wall "B" may be detachably fastened in place. Side strips 7 are secured to the wall "B" and constitute means for spacing a top strip 8 from said wall. Spacing blocks 9 are also interposed between the strip 8 and the wall "B." Guide cleats 10 are disposed between and parallel with the side strips 7 and slidably mounted between these cleats and the spacing blocks 9 and between the wall "B" and the top strip 8 are the parallel side members 11 of a slidable booming post "C," the upper ends of said members 11 projecting above the wall "B" and being connected by an arched strap 12.

The rear wall of the wagon body has been indicated at "D" and rests upon the rear end of the floor 3, said wall being provided with straps 13, which extend downward therefrom and are designed to project through notches 14 formed in the rear end of the floor, there being a hinged member 15 secured to the rear end sill of the wagon body and which is detachably engaged by the eye 16, formed at the lower end of the adjoining strap 13. As long as the end wall "D" is in raised position and with the strap 13 extending through the notches 14 it becomes impossible to shift the strap laterally out of engagement with the hinge members 15. When however the rear wall is swung rearwardly and downwardly so as to remove the straps 13 from the notches or recesses 14, it is possible to shift said wall laterally and thus detach it from the hinge

members 15. The rear wall is designed to be held in raised position by a standard 17 preferably in the form of a heavy rod having an eye 18 at its upper end while it lower end extends through the rear sill 2 of the wagon body and is screw-threaded and engaged by a nut or other securing device. The upper portion of this standard extends through a bracket 19 fastened to and extending inwardly or forwardly from the upper edge of the wall "D." Obviously it is impossible to swing this rear wall downward and to detach it, unless the standard 17 is first detached from the rear end sill 2 and withdrawn therefrom.

The side sills 1 are securely attached to the transverse sills 2 by means of angular straps 20 which extend under the end portions of the transverse sills and thence between the said sills and the inner walls of the said side sills, the upper ends of said straps being bent outwardly over the said side sills and terminating in eyes 21 constituting hinge members. These eyes 21 receive pintles 22, which extend laterally from the lower ends of hinge straps 23, to which the slats 24 and 25 constituting the side walls or panels of the body are secured. The straps 26 located at the front ends of the panels differ from the straps 23 in that they are formed of flat strips of metal offset laterally to a slight extent adjacent their upper ends and provided in said upper ends with openings 27 for the reception of chains 28 which are secured to the front wall "B" and are utilized for securely fastening the side walls or panels in upright positions and against the edges of the front and rear walls. The straps 23 however are each formed with a longitudinal flange 29 perpendicular thereto and having a brace rod 30 pivoted to it, the lower end of the brace rod being formed with a substantially U-shaped engaging head 31 preferably arranged at an angle to the rod 30. The slats 24 and 25 are detachably secured to the straps 23 and 26 preferably by means of bolts 32, and these slats are rabbeted as indicated especially in Fig. 6 so as to form tight joints therebetween, it being possible, whenever desired, to remove alternate slats and thus obtain side walls or panels consisting of spaced slats and which are particularly desirable if hay and the like is to be carried in the wagon.

The heads 31 of the bracing rods 30 are designed to engage teeth 33 outstanding from plates 34 which are fastened in any preferred manner to the side sills 1. The teeth on each plate are arranged in vertical series and the ends thereof are lapped by a guide or retaining rod 35 which is integral with the plates 34. In fact, said plates 34 and the teeth and rod 35 may all be struck from a single blank of metal though it is

deemed desirable to cast them in a single piece. The distance between the teeth 33 and the retaining rod 35 is sufficient to permit the head 31 to pass therebetween. The parts are so proportioned that when the side walls or panels are disposed perpendicularly to the bottom "A" the heads 31 will all rest upon the upper teeth 33.

Each side panel or wall of the wagon body has L-shaped brackets 36 secured thereto adjacent its upper edge and extending beyond the outer face thereof. Each of these brackets is provided at its free end with an eye 37 and the eyes of the brackets on each panel are designed to receive pintles 38 extending laterally from straps 39 to which slats 40 are fastened, said slats and straps forming auxiliary wings for use in connection with the side walls or panels either as extensions thereof or as top sections for the body. Relatively short end gates 41 are hingedly connected to the end portions of these wings and are also preferably formed of slats suitably connected as by means of cross strips 42.

Reference to the drawings, and particularly to Figs. 1 and 2, will disclose the fact that brackets 36 extend laterally beyond the flanges 29 of straps 23. It will be obvious therefore that, as shown in dotted lines in Fig. 2, either or both of the wings formed by slats 40 can, when not in use, be suspended from the brackets 36, and with its end gates 41 folded thereon.

When it is desired to arrange the parts of the wagon body so that it can be used for holding threshed grain and the like, the side walls or panels are swung into position against the side edges of the front and rear walls "B" and "D" and are fastened in these positions by means of chains 28 and also by means of additional chains 43 secured to the rear end portions of the side panels. All of these chains have hooks, (not shown, but similar to those ordinarily employed) whereby the parts may be held in any positions to which they may be adjusted by placing the hooks in engagement with the links. Should it be desired to cover the contents of the wagon body when the same is tight as in Fig. 1, the auxiliary wings are swung upwardly and inwardly on their hinges so that each of them will assume the position shown at the bottom of Fig. 1, to wit, overhanging the bottom "A" and perpendicular to the side walls or panels. These auxiliary wings are supported in such position by the straps 39 which bear on the upper edges of the side walls.

Should it, for any reason, be desired to have the walls of the box of more than ordinary height, as, for example, where livestock is being transported, the auxiliary wings can be raised into upright positions as shown in Fig. 2 and the end gates 41

thereof caused to lap, any suitable means being provided whereby these wings can be secured together and directly above the end walls "B" and "D". In Fig. 2 the end gates have been shown provided with openings 44 into which any suitable securing means may be placed. These securing means may be in the form of bolts, stakes or any other object which will enter the openings 44 and prevent independent movement of the lapping end gates.

Should it be desired to employ an open box the braces 31 are swung laterally out of engagement with the teeth 33 and the side walls or panels are thus permitted to swing downwardly and outwardly on their hinges. Whenever they have reached predetermined positions the braces 30 can be swung inwardly so as to bring the heads 31 into engagement with the adjoining teeth. The positions of the parts when opened in this manner have been clearly indicated in Fig. 4. When the side panels are thus located the auxiliary wings can be extended upwardly therefrom as shown in said Fig. 4 and the end gates 41 secured to the end walls "B" and "D" in the same manner as they are secured together when located as in Fig. 2. As heretofore stated, alternate slats can be removed from the side panels if it is desired to have openings within said panels.

It will be noted by referring to Figs. 2, 4 and 6, that the side sills 1 are rabbeted and

constitute seats for the side walls or panels when they are in upright positions as indicated in Figs. 2 and 6. It thus becomes impossible for grain to escape between the side sills and the side walls.

Obviously various changes may be made in the construction and arrangements of parts without departing from the spirit or sacrificing any of the advantages of the invention.

What is claimed is:—

A wagon body, a side panel hingedly connected thereto, means for supporting said panel at a desired angle to the bottom of the body, a series of angular brackets secured to the outer face of the panel adjacent the upper edge thereof, said brackets extending outwardly from the panel, straps pivotally connected to the brackets and an auxiliary wing secured to the straps, said straps being movable onto the side panel to support the wing at right angles to the panel and said straps being movable into position outside of the panel to support the wing outside of and parallel with the panel.

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

JOHN W. BROWN.

Witnesses:

CLEM C. BROWN,
CALLIE PEPPE.