E. G. MONTHEI.

WAGON.

APPLICATION FILED MAR. 4, 1916.

1,235,361.

Patented July 31, 1917.

2 SHEETS—SHEET 1.

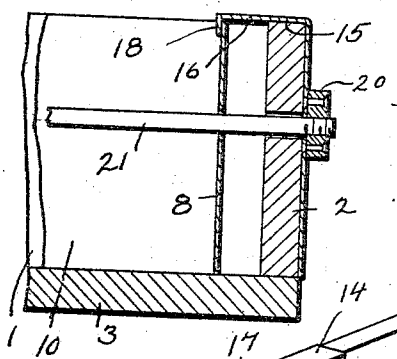


Fig. 3.

Fig. 1.

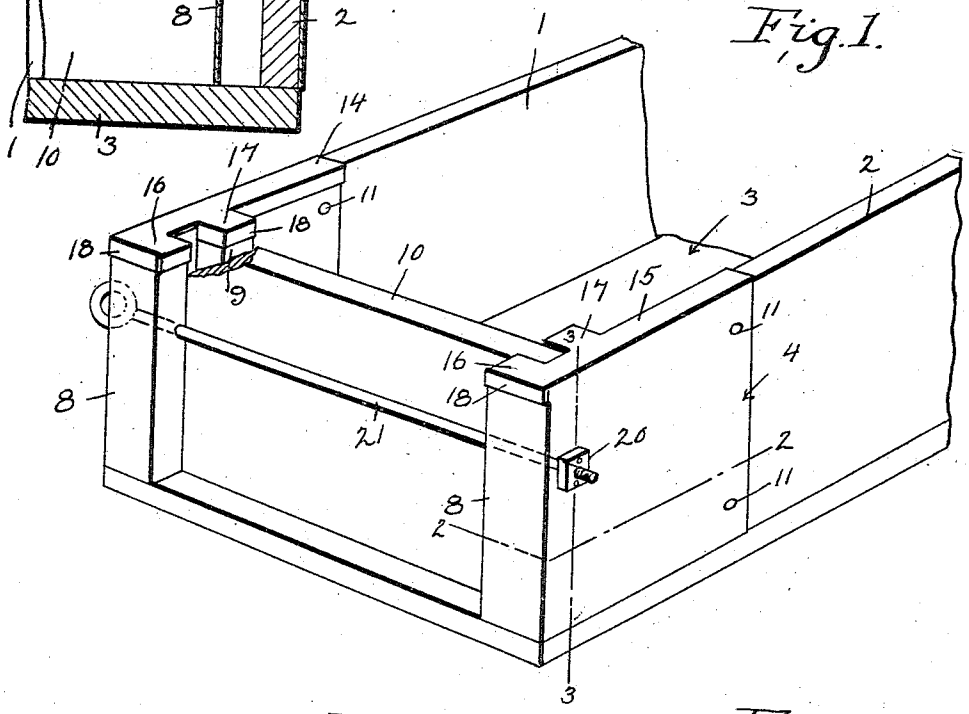


Fig. 4.

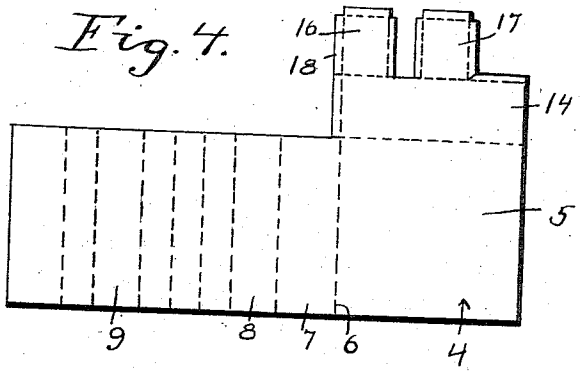
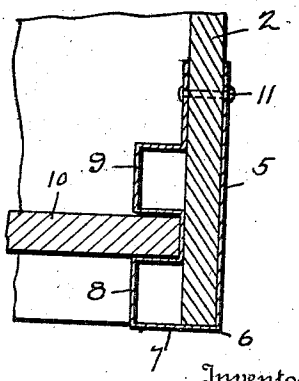


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 5.

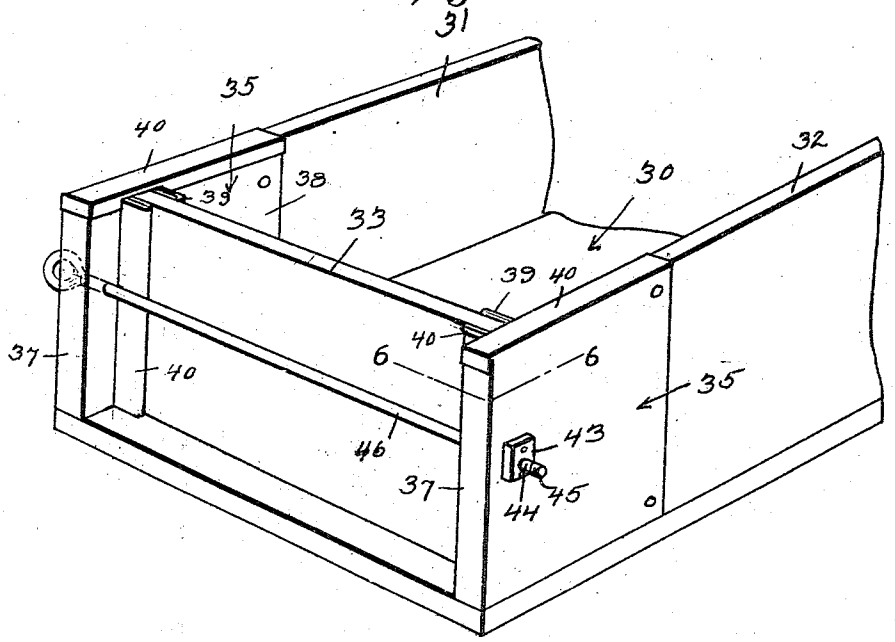


Fig. 6.

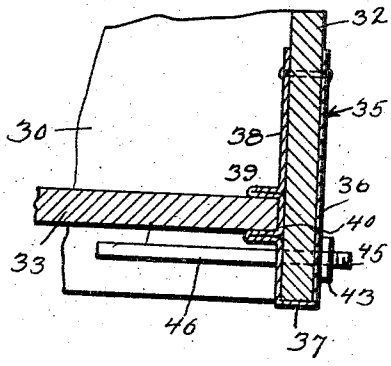
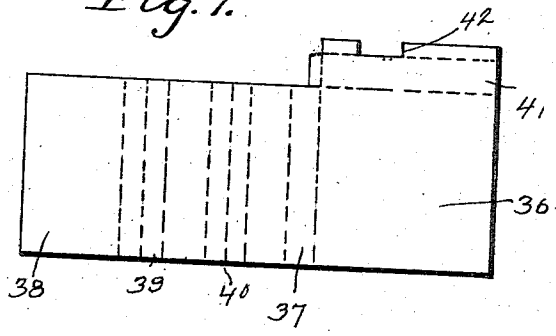


Fig. 7.



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UNITED STATES PATENT OFFICE.

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WAGON.

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Application filed March 4, 1916. Serial No. 82,162.

To all whom it may concern:

Be it known that I, EDWARD G. MONTHEI, a citizen of the United States, residing at Jefferson, in the county of Greene and State of Iowa, have invented certain new and useful Improvements in Wagons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wagon boxes and the primary object of the invention is to provide metallic reinforcing plates which are attached to the ends of the side boards of a wagon bed and are bent to form inwardly extending portions which form guideways for slidably supporting the ordinary end gates of the wagon box, which metallic reinforcing plates are particularly provided for preventing the splitting or wearing of the ends of the side boards of the wagon, and which also eliminate the necessity of the employment of a number of wooden cleats as ordinarily employed for slidably supporting the end gate of the wagon box or bed.

With the foregoing and other objects in view this invention consists in such novel features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings and claimed.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters designate like and corresponding parts throughout the several views, and in which:—

Figure 1 is a fragmentary perspective view of a wagon box showing the improved reinforcing plates attached to the side boards of the same.

Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

Fig. 3 is a sectional view on the line 3—3 of Fig. 1, and

Fig. 4 is a plan view of the blank from which one of the reinforcing plates is formed.

Fig. 5 is a fragmentary perspective view of the end of a wagon bed showing a modified form of the reinforcing plate attached thereto.

Fig. 6 is a section on the line 6—6 of Fig. 5, and

Fig. 7 is a plan of the blank of which a modified form of reinforcing plate is formed.

Referring more particularly to the drawings, 1 and 2 designate the side boards of an ordinary wagon box or bed 3. Each of the side boards 1 and 2 has a reinforcing plate which is generically indicated by the numeral 4 attached to its rear end. The reinforcing plates 4 are constructed of sheet metal or analogous material, and they are bent to form an outer portion 5 which lies in facial abutment with the outer surface of the side boards adjacent their rear ends. The blank of which the protecting plate 4 is formed, is bent as is shown at 6 to form the end portions 7 which extend transversely or substantially at right angles to the portion 5 and also extends across the end of the side board. The blank is further bent to form a pair of spaced inwardly extending substantially rectangular projections 8 and 9 which form guides for the end gate 10 of the wagon. The end of the blank which extends outwardly from the outstanding portion 9 lies in facial abutment with a portion of the inner surface of the side board and is attached thereto by means of bolts or analogous fastening devices indicated at 11.

The blank from which the protecting plate is formed has an enlargement indicated at 14 formed upon its upper edge which is bent over the top of the side board as clearly shown at 16 in Figs. 1 and 3 of the drawing. Tongues 16 and 17 are formed upon the outer edge of the portion 14 and they are positioned over the upper ends of the outstanding portions 8 and 9 for preventing water from falling downwardly within the interior of the outstanding portions and rotting the wood of the wagon box or bed. The edges of the tongues 16 and 17 are bent downwardly as shown at 18 for engagement with the upper ends of the vertical sides of the outstanding portions 8 and 9. The outer section 5 of one of the plates has a nut 20 riveted thereto, which nut receives the screw

threaded end of the tie rod 21, which is used for holding the end gate 10, in place. The tie rod extends through the outstanding projections 8 which are formed upon the plates attached to the side boards 1 and 2 of the bed. The sides of the outstanding portions 8 and 9 are spaced from each other, as clearly shown in Fig. 2 of the drawings forming hollow outstanding rectangular portions which form guides for the end gate 10. In Figs. 5, 6 and 7, a modified form of the invention is shown, which includes a wagon bed or box 30 having the ordinary type of side boards 31 and 32 and an end gate 33. The side boards 31 and 32 have protecting plates indicated by the numeral 35 attached thereto.

Each of the protecting plates 35 are formed from a blank of sheet metal, and they are bent to form the portions 36 which lie in facial abutment with the outer surfaces of the side boards at their ends and to form portions 37 which extend across the ends of the side boards.

Each of the protecting plates 35 is further bent to form a section 38, which is positioned inwardly of the side board and rests against the inner surface of the rear end of the same as clearly shown in Figs. 5 and 6 of the drawings. The side or portion 38 has two outstanding portions 39 and 40 formed thereon, which are spaced to form guides for the end gate 33. The outstanding portions 39 and 40 are bent so that the inner surfaces of the two sections of each of the portions lie in facial abutment with each other, differing from the preferred form as illustrated in Figs. 1 to 4 inclusive in that the projections 8 and 9 are formed as hollow rectangular portions. The portion 36 of each of the plates 35 has a relatively long tongue 41 formed upon its upper edge which is bent for lying in facial abutment with the rear end of the upper edge of the side boards of the wagon box or bed. The outer edge of the tongue 41 is bent downwardly to overlap the upper edges of the portions 38 and 37, and the tongue 41 is provided with a cut-out portion 42 to permit of the free and easy insertion of the end gate 33 between the spaced members 39 and 40.

One of the sections 36 of one of the wear or reinforcing plates 35 has a nut 43 riveted thereto as shown at 44, which nut receives the screw threaded end 45 of the tie rod 46 which is employed for holding the side boards 31 and 32 in their proper position with respect to each other and the bottom of the wagon box and also for holding the end gate 33 in proper place against accidental removal.

The improved wear or protecting plate may be attached to a wagon which has been in use or they may be mounted upon a new wagon at the time of building the same and it is apparent from the foregoing description and the drawing that these wear or protecting plates will prevent the splitting of the ends of the side boards of the wagon box or bed and also prevent wear upon the ends of the side boards.

If so desired, the improved protecting or wear plate may be attached to both the front and rear end of the side boards of the wagon box or bed.

In reducing the invention to practice, certain minor features of construction, combination and arrangement of parts may necessitate alterations to which the patentee is entitled provided such alterations are comprehended within the scope of what is claimed.

What is claimed is:—

1. The combination with a wagon bed including side boards and an end gate, of metallic plates secured to said side boards adjacent to their ends, said metallic protecting plates including sections for extending over and lying in a facial abutment with the outer surfaces of said side boards adjacent their ends, portions for extending over the ends of the side boards, portions for covering the inner surfaces of said side boards adjacent their ends, tongues formed upon said first named sections and being bent to assume a horizontal plane for extending across the upper edges of the side boards, the portions of said plates which are positioned over the inner surfaces of the ends of the side boards being bent to form a pair of spaced outstanding end gate guides, the edges of said tongues being bent downwardly for overlapping the upper edges of the inner portions of said plates and said side boards.

2. The combination with a wagon bed including side boards and an end gate, of metallic plates secured to said side boards adjacent to their ends, said metallic protecting plates including sections for extending over and lying in facial abutment with the outer surfaces of said side boards adjacent their ends, portions for extending across the ends of the side boards, portions for covering the inner surfaces of said side boards adjacent their ends, tongues formed upon said first named sections of said protecting plates and being bent to assume a horizontal plane for extending across the upper edges of the side boards, the portions of said plates which are positioned over the inner surfaces of the ends of the side boards being bent to form a pair of spaced outstanding substantially rectangularly shaped members for forming guides for said end gate, said substantially rectangular shaped outstanding members being hollow and tongues formed upon said first named tongues and extending over the

tops of said outstanding members for forming covers therefor, the edges of said tongues being bent downwardly for overlapping the upper edges of the inner portions of said plates and said substantially rectangular members.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD G. MONTHEI.

Witnesses:

C. E. WHITE,

B. J. SPILKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."