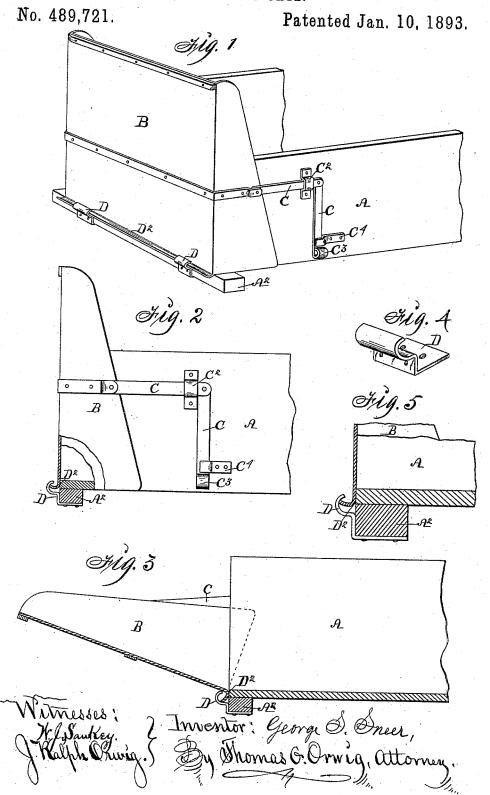
G. S. SNEER. WAGON END GATE.



UNITED STATES PATENT OFFICE.

GEORGE S. SNEER, OF MARENGO, IOWA.

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 489,721, dated January 10, 1893.

Application filed April 11, 1892. Serial No. 428,712. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. SNEER, a citizen of the United States of America, residing at Marengo, in the county of Iowa and State of Iowa, have invented an Improvement in Wagon End-Gates, of which the following is a specification.

My invention relates to United States Patent No. 482,835 issued to me September 22,1892.

My object is to provide improved means whereby a tight joint may be maintained between the lower edge of the end gate and the bottom of the wagon box, both when in a closed position and when in a partially opened po-15 sition as required for use as a shoveling board, and at the same time provide a connection which is simple, cheap and durable, and also allow the end gate to be readily and quickly detached from a wagon.

My invention consists primarily in the construction and formation of hinge sections to be secured to the under rear portion of a wagon box and in the peculiar formation of the lower edge of the end gate whereby it is adapt-25 ed to closely engage the wagon bed at all times.

In the accompanying drawings, Figure 1 shows in perspective a portion of a wagon box, an end gate secured thereto and in a closed position. Fig. 2 is a side view of the same hav-30 ing parts of the end gate and wagon box removed, showing the hinge connection in vertical section. Fig. 3 is a vertical longitudinal sectional view of a portion of the wagon box and the end gate showing the latter in posi-35 tion as required for use as a shoveling-board. Fig. 4 is an enlarged detail perspective view of one of the hinge sections. Fig. 5 is an enlarged, vertical longitudinal, sectional view of the rear corner of the wagon box and end gate, 40 the latter being in a closed position.

Referring to the accompanying drawings the reference letter A is used to designate the wagon box and A² cross brace under the rear end thereof. B the end gate formed of sheet

C represents the supporting and locking arms of the end gate, they are pivotally attached to the end gate extended forwardly through the metal loops C² which are secured 50 to the wagon box. These arms are jointed in I

their central portion and have the loops C³ formed on their free ends, which loops are of such size and shape as to engage the loops C2.

C⁴ are hooks secured to the sides of the wagon box to engage the arms C as required to lock 55 the end gate to the wagon.

D represent the hinge sections, formed complete from a single piece of metal adapted to be secured to the under side of the cross brace A^2 extended upwardly over the rear end there- 60 of into proximity to the under edge of the bottom of the wagon box and then curved rearwardly and upwardly therefrom in an approximate semicircle, and terminating in proximity to the rear end of the bottom of the wagon box 65 and slightly below its top edge, for purposes hereinafter clearly set forth.

The lower edge of the end gate is adapted to form the mating part of a hinge connection by being formed as follows: Along the line 70 D2 it is bent rearwardly and curved slightly

upwardly.

I do not desire to be understood as limiting myself to the form of locking device shown and described, as it forms no part of my pres- 75 ent invention nor do I wish to restrict myself to the number of hinge sections employed.

The practical operation of my invention is as follows: Assuming that the end gate is detached from the wagon and it is desirable to 80 connect it therewith, I place the end gate in an approximately horizontal position with its lower edge between the ends of the hinge sections D and the rear end of the wagon box and then raise the end gate to a vertical po- 85 sition which operation it will be seen will connect the end gate with the wagon box and cause it to assume a position in close proximity relative thereto by reason of the bent portion of the end gate acting upon an in- 90 clined plane of the hinge sections when being closed, as clearly illustrated in Fig. 5. In a closed position the end gate is prevented from moving either upwardly or downwardly by the said hinge connection, and when sup- 95 ported in a position as required for use as a shoveling board the end gate is also held in close proximity to the edge of the wagon box by the curved edge of the end gate impinging an inclined surface. COI

Having thus described my invention what | I claim as new and desire to secure by Letters

Patent is-

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1. The combination, in a wagon end gate, of a 5 metal strip, curved rearwardly from the lower edge of the end gate one or more hinge sections secured to the rear end of the wagon box, curved rearwardly and upwardly therefrom and terminating in proximity to the upro per edge of the bottom of the wagon box, and means for securing the end gate in a closed position for the purposes set forth.

2. An improved wagon end gate formed wholly or in part of sheet metal having its 15 lower edge curved rearwardly and upwardly

a plurality of hinge sections secured to the bottom of the wagon box, curved rearwardly and upwardly therefrom and terminating in proximity to the rear upper surface of the bottom of the wagon box and means for se- 2 curing the end gate in a closed position and for supporting it in approximately horizontal position as required for use as a shoveling board, substantially as set forth, for the purposes stated.

GEORGE S. SNEER.

Witnesses:

J. RALPH ORWIG, THOMAS G. ORWIG.