S. R. STURGIS.

WAGON BODY FRAME.

APPLICATION FILED MAY 12, 1914.

1,126,912.

Patented Feb. 2, 1915.

2 SHEETS—SHEET 1.

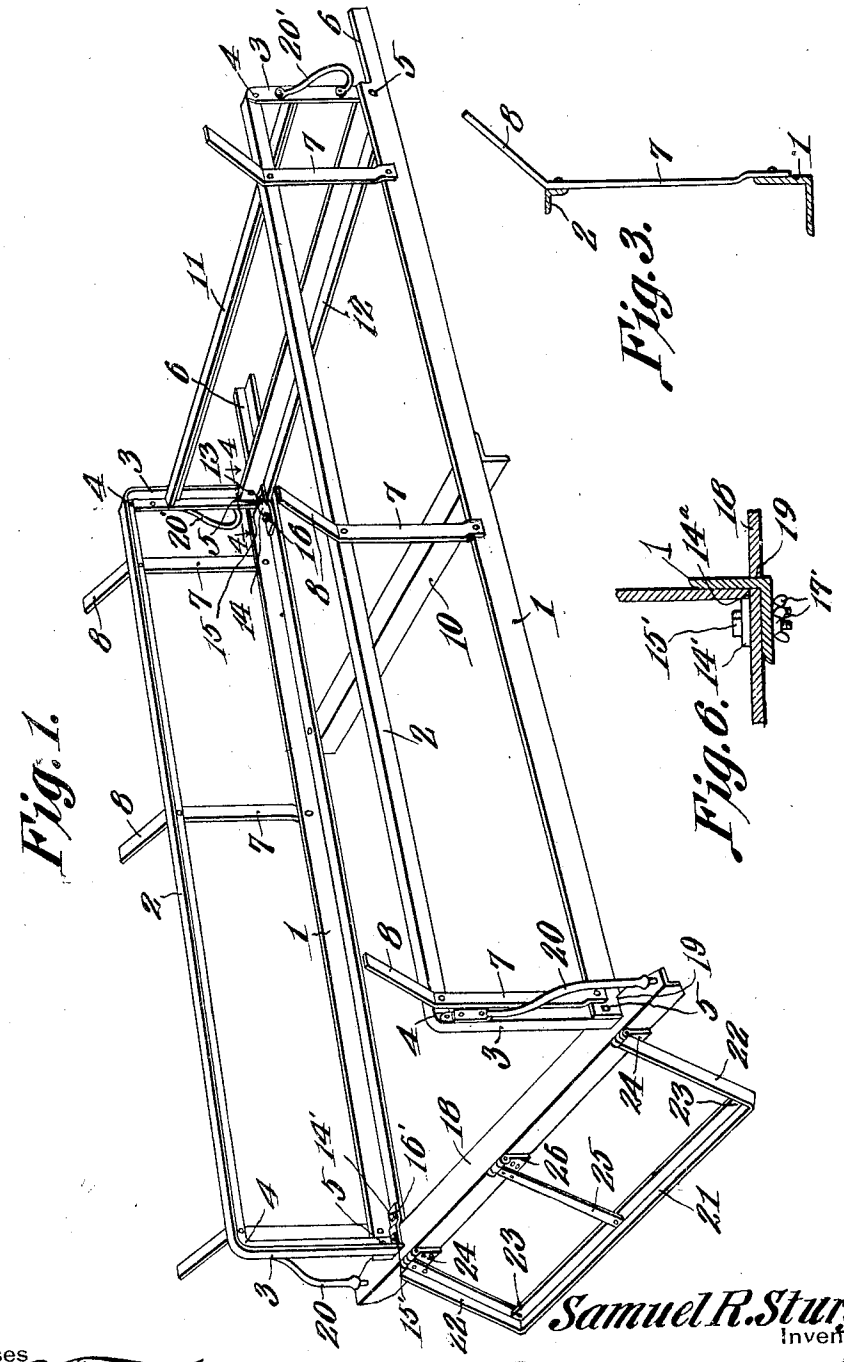


Fig. 1.

Fig. 3.

Fig. 6.

Witnesses

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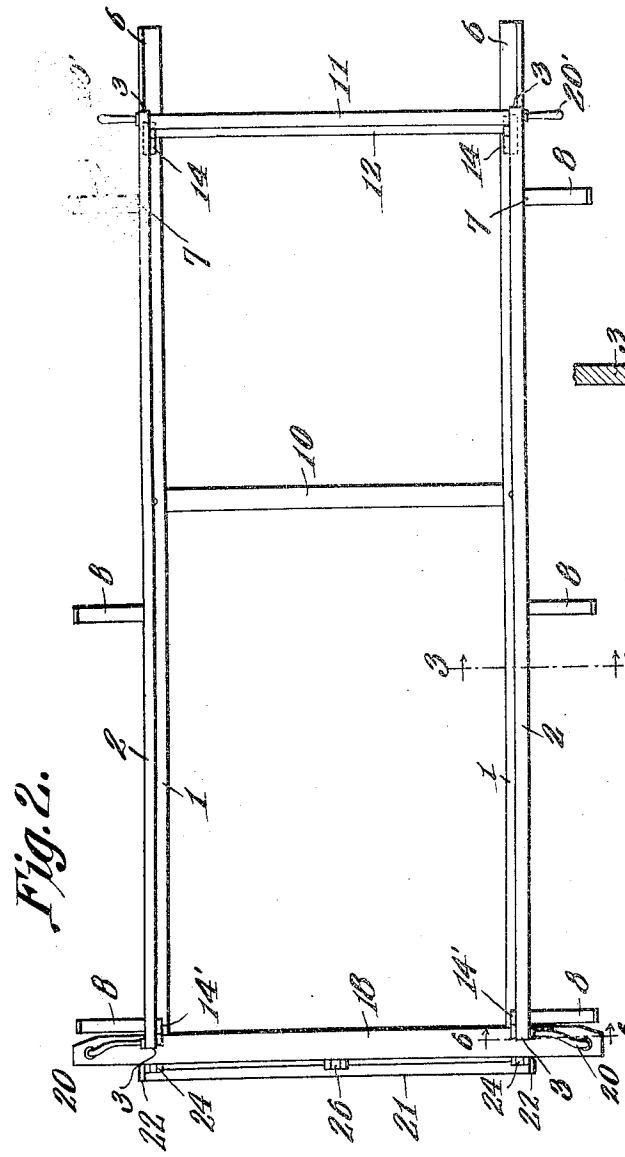


Fig. 2.

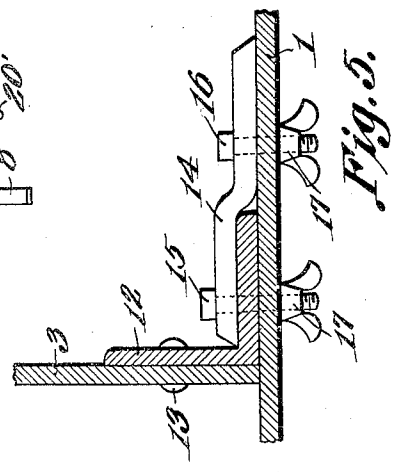


Fig. 3.

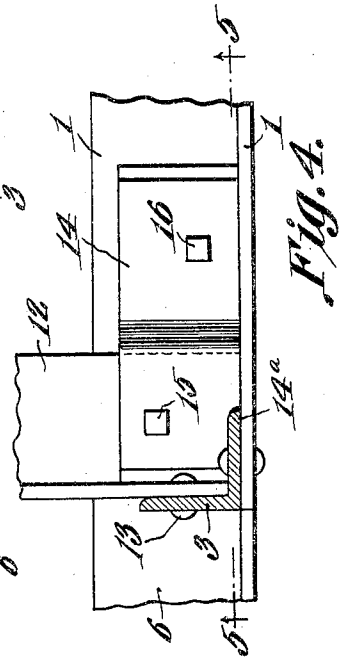


Fig. 4.

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UNITED STATES PATENT OFFICE.

SAMUEL E. SAVAGE, OF PHILADELPHIA, PENNSYLVANIA.

WAGON-BODY FRAME.

1,126,912. Specification of Letters Patent. Patented Feb. 2, 1915.

Application filed May 19, 1914. Serial No. 839,191.

To all whom it may concern:

Be it known that I, SAMUEL E. SAVAGE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Wagon-Body Frame, of which the following is a specification.

The present invention appertains to wagon bodies, and aims to provide a novel and improved metallic frame for the bodies of wagons, auto trucks, or other vehicles.

The present invention contemplates the provision of a metallic vehicle body frame, comprising a unique assemblage of the component parts, whereby the frame will be substantial, light, simple and inexpensive in construction, as well as being convenient, practical, serviceable and efficient in its use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiment in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the vehicle body frame. Fig. 2 is a plan view thereof. Fig. 3 is an enlarged sectional detail taken on the line 3—3 of Fig. 2. Fig. 4 is an enlarged sectional detail taken on the line 4—4 of Fig. 1. Fig. 5 is a sectional detail taken on the line 5—5 of Fig. 4. Fig. 6 is an enlarged sectional detail taken on the line 6—6 of Fig. 2.

The present vehicle body frame embodies two side sections, each of which comprises a lower longitudinal side rail 1 and an upper longitudinal side rail 2, each of which is fashioned from angle iron stock. The upper rail 2 of each side section has its end portions bent angularly or deflected, as at 3, to provide standards which have their lower ends attached to the corresponding lower rail 1, as will hereinafter appear. The downwardly projecting flanges of the rails 2 are split, overlapped and riveted or otherwise secured together, at the bends between the end portions or standards 3 and the body portions of the said rails 2, as designated at 4, and thereby strengthening the joint between the standards 3 and the body portions of the rails 2. The forward standards 3 have their lower ends fitted within the angle iron beams 1, the outwardly facing flanges of the forward standards 3 having their lower end portions riveted or otherwise secured to the inner faces or sides of the upstanding outwardly facing flanges of the rails 1, as designated at 5. The forward ends of the lower rails 1 preferably project beyond the forward standards 3, as at 6, for supporting the foot board, or the like.

A series or plurality of upright strips 7 are riveted or otherwise secured to the outwardly facing flanges of the rails 1 and 2, adjacent the standards 3 and midway between the said standards. The upper ends of the strips 7 project above the upper rails 2, and are bent angularly outward, for the attachment of the angular side boards, as will be apparent.

The lower rails 1 are connected between their ends, by an angle iron cross or tie bar 10, which has its upper flange riveted or otherwise secured to the bottom of the lower flanges of the rails 1, the other flange of the cross or tie bar 10 depending.

The forward standards 3 are connected by an angle iron cross or tie bar 11, which has its ends fitting within the front angle iron standards 3, the forwardly facing flange of the bar 11 having its terminal portions riveted or otherwise secured to the inner sides of the forwardly facing or inwardly projecting flanges of the forward standards 3.

The lower ends of the forward standards 3, and the forward end portions of the lower rails 1, are connected by an angle iron cross bar 12, which has its end portions fitting within the corners between the rails 1 and the forward standards 3. The upstanding or forwardly facing flange of the cross bar 12 has its terminal portions riveted or otherwise secured, as at 13, to the inner sides of the inwardly projecting flanges of the forward standards 3, and the lower or rearwardly projecting flange of the cross bar 12 rests upon the lower or inwardly projecting flanges of the rails 1, and is secured thereto by means of a pair of clamps 14.

The end portions of each clamp 14 are offset, whereby one end portion of each clamp 14 may rest upon the rearwardly projecting flange of the bar 12, while the other end

portion may rest upon the bottom flange of the corresponding rail 1. A clamping bolt 15 is engaged through one end portion of each clamp 14, through the lower or rearwardly projecting flange of the cross bar 12, and through the lower or inwardly projecting flange of the corresponding rail 1, while a similar bolt 16 is engaged through the other end portion of the said clamp 14 and through the bottom or inwardly projecting flange of the said rail 1, the heads of the bolts 15 and 16 being disposed uppermost, and thumb or wing nuts 17 being threaded upon the lower ends of the said bolts to clamp the front cross bar 12 and corresponding side rails 1 together securely.

The rear ends of the rails 1 and the lower ends of the rear standards 3, are connected by an angle iron sill or cross piece 18, which has one flange depending at the rear and the other flange projecting forwardly. The upper or forwardly projecting flange of the sill 18 is provided with open slots 19 adjacent its ends, which slots engage over the rear ends of the upstanding flanges of the rails 1, whereby the upper or forwardly projecting flange of the sill 18 fits upon the rear ends of the lower or inwardly projecting flanges of the rails 1, and below the lower ends of the rear standards 3.

The sill 18 is secured to the rails 1, by means of clamps 14′ similar to the clamps 14 above described, certain end portions of the clamps 14′ overlapping the upper or forwardly projecting flange of the sill 18, and the other end portions of the clamps 14′ overlapping the lower or inwardly projecting flanges of the rails 1. Bolts 15′ and 16′ are engaged through the respective end portions of the clamps 14′ and through the respective flanges of the sill 18 and rails 1. Thus, the bolts 15′ engage through the rear end portions of the clamps 14′, the upper or forwardly projecting flange of the sill 18, and the lower flanges of the rails 1, while the clamping bolts 16′ engage through the forward end portions of the clamps 14′ and the lower flanges of the rails 1, thumb or wing nuts 17′ being threaded upon the lower ends of the bolts 15′ and 16′ to secure the respective parts together.

Due to the peculiar assemblage of the sill 18 with the rear standards 3 and rear ends of the lower side rails 1, the rear end of the frame will be very rigid, and will withstand considerable strain. Rear braces 20 have their upper ends riveted to the outer flanges of the rear standards 3, and have their lower ends secured to the upper flange of the sill 18 adjacent the ends of the sill, beyond the rear standards. Handles or hand holes 20′ are preferably riveted or otherwise secured to the outer flanges of the forward standards 3.

The rear end gate embodies a frame comprising an angle iron member 21 having its end portions bent angularly, as at 22, one flange of the angle iron member 21 being split, overlapped and riveted or otherwise secured together, at the corners or bends, as designated at 23. In this manner, the joint between the body portion and angular ends 22 of the angle iron member 21 will be strengthened. The angular end portions 22 are connected to the rear or depending flange of the sill 18, by means of hinges 24, and an intermediate strip 25 is preferably riveted or secured to the intermediate portion of the body of the angle iron member 21, and is connected at its other end to a hinge 26 secured to the intermediate portion of the rear or depending flange of the sill 18. Thus, the rear end gate frame may be swung upwardly against the rear standards 3, or may be swung open downwardly, as seen in Fig. 1.

The side panels (not shown) which may be of wood or metal, may be readily fitted within the flanges of the rails 1 and 2 and standards 3, and the bottom may be readily seated upon the cross bars or beams 12, 10 and 18, and upon the lower flanges of the lower rails 1. Similarly, the front end panel may be fitted between the angle iron members 11 and 12 and within the forward standards 3, while the panel of the rear end gate may be secured within the angle iron member 21. The present frame is adapted to receive either wooden or metal panels, whichever is desired.

A vehicle body frame, constructed in accordance with the present invention, will be very substantial and comparatively light in construction, and may be used upon various running gears. The frame may be readily constructed and the component parts assembled, and it is to be understood that the frame may be constructed in various sizes or proportions, and is susceptible of other alterations within the scope of the appended claims, without departing from the spirit of the invention.

The clamps 14 and 14′ are preferably provided with cut away portions or notches 14ª for receiving the lower ends of the outwardly facing flanges of the standards 3.

Having thus described the invention, what is claimed as new is:—

1. A vehicle body frame including lower angle iron side rails having upwardly projecting and lower inwardly projecting flanges, forward angle iron standards having their lower ends fitting within the flanges of the said rails, the standards having outwardly facing flanges secured to the upwardly projecting flanges of the said rails, an angle iron cross bar having its ends fitting between the lower inwardly projecting flanges of the said rails and the other flanges of the said standards, the said cross

bar having an upstanding flange terminally secured to the last mentioned flanges of the said standards, and clamps securing the lower flange of the said cross bar to the lower flanges of the rails.

2. A vehicle body frame including lower angle iron side rails having upwardly projecting and lower inwardly projecting flanges, rear standards having their lower ends secured to the upwardly projecting flanges of the said rails, an angle iron sill having an upper forwardly projecting flange and a rear depending flange, the upper forwardly projecting flange of the sill having slots engaging the rear ends of the upwardly projecting flanges of the said rails, the said upper forwardly projecting flange of the sill resting upon the lower flanges of the said rails under the rear standards, and clamps for securing the said upper flange of the sill upon the lower flanges of the said rails.

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

SAMUEL R. STURGIS.

Witnesses:
ERNEST BERRY,
C. HIPPLE.