

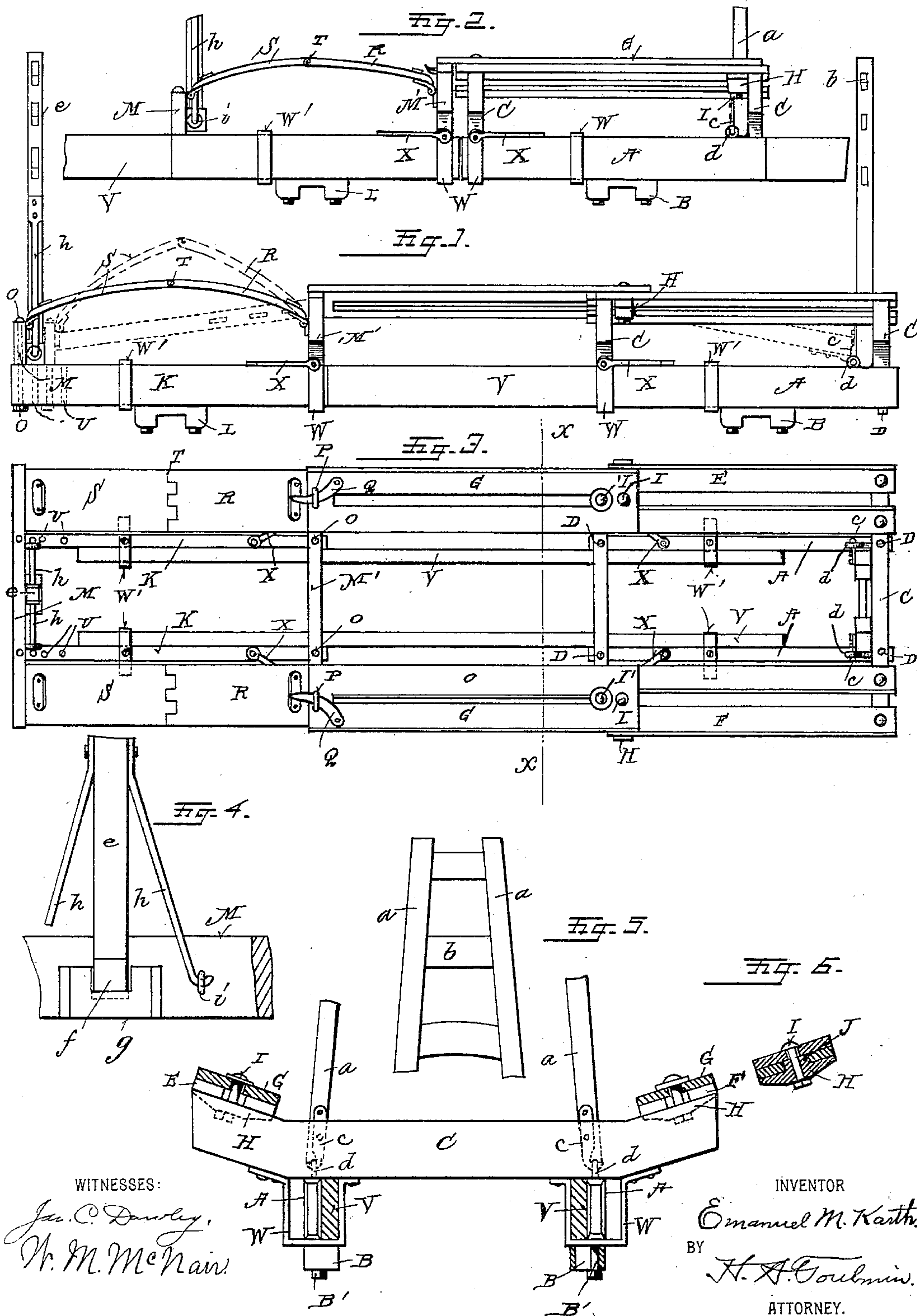
No. 618,102.

Patented Jan. 24, 1899.

E. M. KARTH.  
HAY WAGON BODY.

(Application filed July 30, 1898.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EMANUEL M. KARTH, OF ASHLAND, OHIO.

## HAY-WAGON BODY.

SPECIFICATION forming part of Letters Patent No. 618,102, dated January 24, 1899.

Application filed July 30, 1898. Serial No. 687,262. (No model.)

*To all whom it may concern:*

Be it known that I, EMANUEL M. KARTH, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented certain new and useful Improvements in Hay-Wagon Bodies, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in hay-wagon bodies; and the objects of the invention are to so make the body that it may be adjusted to different lengths for different lengths of running-gears, 15 that it may be adjusted to different widths for different widths of running-gears, and that its wheel-guards may be adjusted for wheels of different height, and to provide detachable standards for the holding down.

20 With these several objects in view my improved body consists of the peculiarities hereinafter named, and particularly pointed out in the claims.

25 In the accompanying drawings, forming a part of this specification and on which like reference-letters indicate corresponding parts, Figure 1 is a side elevation of my wagon-body. Fig. 2 is a similar view with the body adjusted to a shorter length; Fig. 3, a plan view of the 30 body as shown in Fig. 1; Fig. 4, a detail view of one of the end rails with the standard in elevation; and Fig. 5, a cross-sectional view on the line *x x* of Fig. 3, showing the other standard in elevation. Fig. 6 is a cross-section showing slide J between the slats.

35 The frame consists of two sections adjustably connected together by two intermediate pieces and by two removable sills. The front section is composed of sills A, having bolster-blocks B, carrying cross-beams C, which are 40 securely bolted to them by bolts D, which pass down through the cross-beams C and the sills A. On these cross-beams are secured slats E and F, being in pairs on each side, so as to 45 leave a space between them, forming a slot. Slotted boards G rest upon these slats E and F and are arranged to slide back and forth over them, so as to lengthen or shorten the distance from the cross-beam C to the farther 50 ends of the boards G. Bolts I', carried by the inner cross-beams C, project through the

slots of the boards G and hold the boards from slipping off of the slats F when the boards are slid forward upon the slats. A block or slide H is fitted to the under side of the slats 55 E and is fastened to the boards G by bolts I, so that the boards are properly held to the slats, and yet are permitted to slide when the nuts on the bolts I are sufficiently loosened. A slide J fits between the slats and is held by 60 the bolt I. Referring now to the other section—namely, the rear section—it consists of similar sills K, carrying similar bolster-blocks L and supporting cross-beams M and M', also bolted firmly to the sills by bolts O. The cross- 65 beam M' carries staples or eyebolts P, which extend up through the boards G and receive a latch Q, of leather or other material, whereby the boards G are connected with the cross-beam M' in a firm yet detachable manner. 70 To this cross-beam is also hinged the sections R of the wheel-guards, while the sections S of said guards are hinged to the cross-beam M, the sections themselves being interconnected by a hinge or pivotal joint, as shown 75 at T, so that the arch formed by the guards may be made higher or lower, as desired, to accommodate the guards to large or small wheels. To change the guards, the cross- 80 beam M is adjustably fastened to the sills K by the provision of the series of holes U in the sills, so that the bolts O can be removed and inserted in one or the other of such holes, according to the desired adjustment of the cross-beam M. Thus it will be understood 85 how two of the objects of my invention are carried out—namely, the longitudinal adjustment of the frame and the variance of the height of the arch formed by the guards. In Fig. 2 the sections are shown brought up close 90 together, with the boards G overlapping the slats E and F entirely. In Figs. 1 and 3 the frame is shown lengthened out.

I will now describe the construction by which the width of the frame is varied to suit 95 running-gears of different widths.

The letter V designates two removable sills which fit in stirrups W, fastened to the cross-beam C and the cross-beam M', respectively, and also in the stirrups W', secured to the 100 fixed sills. The stirrups W embrace the fixed sills and leave a space on each side in which



to insert these removable sills. When the latter are in the inner loops of the stirrups W and in the stirrup W', the adjustment is for a narrow running-gear. When they are  
 5 in the outer loops of the stirrups W and W', the adjustment is for a wider running-gear. The bolster-blocks B are slotted, as shown in Fig. 5, so that they may be adjusted laterally in and out by releasing the screws B', by which  
 10 they are held. As shown in Fig. 5, they are adjusted to agree with the position of the removable sills while in the inner loops. The stirrups W' assist in holding the body perfectly rigid when lengthened out to accom-  
 15 modate a long running-gear and permit of using much shorter removable sills than would otherwise be found necessary, as there is no necessity of the ends of these sills being under the end cross-beams, and conse-  
 20 quently such removable sills will not project a long distance beyond the hay-body when the latter is shortened.

Braces X serve to strengthen the frame structure and may or may not be used.

25 Referring now to the standards by which the holding-down pole is held, the letter *a* represents a front standard, being composed of two bars connected by cross-pieces *b* and having at their lower ends two hooks *c*, which  
 30 hook into eyebolts *d*, carried by the sills A. The feet of the bars rest upon the sills A. (See Figs. 1 and 2.) In order to detach the standard, the bars are sprung inward until one or both of the hooks are clear of the eye-  
 35 bolts.

The rear standard is composed of an upright *e*, stepped at *f* in a recessed block *g*, secured to the cross-beam M. Brace-rods *h*, fastened to the upright, spring into the eye-  
 40 bolts *i*. To remove the standard, these braces are sprung inward to disengage them from the eyebolts, when the standard can be lifted out. Both standards lean against their respective cross-beams M and C in an outward  
 45 direction, but may both be folded in and laid

down on the beams M' and C', respectively, as shown in dotted lines in Fig. 1.

Thus it will be seen that my improved frame may be adjusted in length, that it may have its wheel-guards adjusted higher or lower by  
 50 simply loosening the two bolts O and placing them in one or the other of the holes U, that it may be adjusted in width by simply drawing the removable sills from the inner and insert-  
 55 ing them in the outer loops of the stirrups W and adjusting the bolster-blocks B by loosening the bolts or screws B', and also that either or both of the standards may be readily re-  
 moved or folded down. Incidentally the removable standards form connections between  
 60 the sections of the frame.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a hay-wagon body, the combination  
 65 with the body proper consisting of sills and cross-beams, of stirrups secured thereto and having a plurality of loops and removable rails insertible in either of the loops so as to vary the distance between the said sills and  
 70 adjustable bolster-blocks.

2. In a hay-wagon body, the combination with a body proper composed of front and rear sections, each having a pair of sills, one or more stirrups having double loops, one of  
 75 which extends beyond the inner face of its respective sill and the other of which extends beyond the outer face of said sill, of removable rails adjustable from the inner loops of said stirrups to the outer loops, said sections  
 80 being adjustable toward and away from each other on said rails, substantially as shown and described.

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

EMANUEL M. KARTH.

Witnesses:

WILLIAM T. DEVOR,  
 EARL H. NOEL.