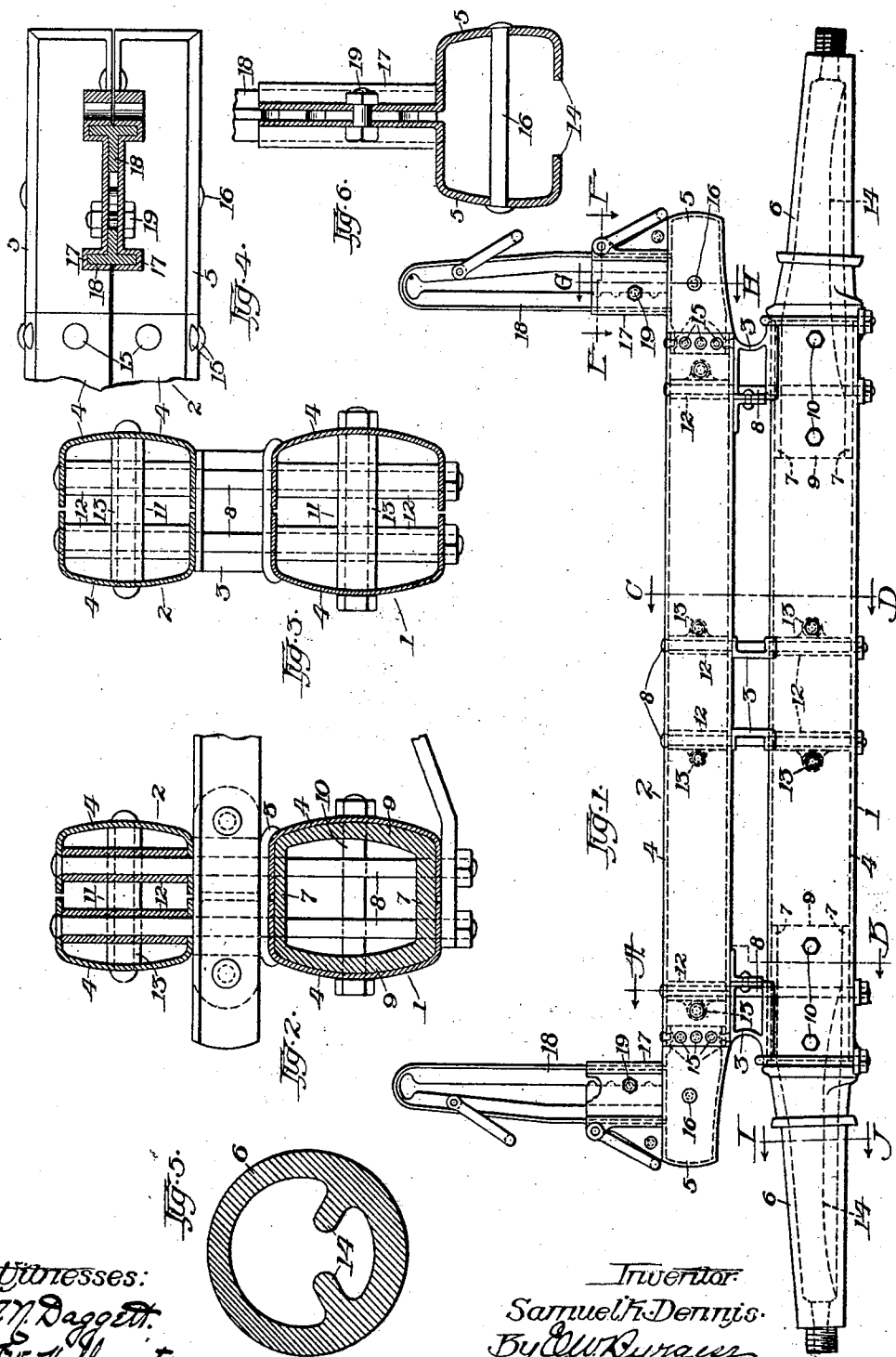


No. 859,209.

PATENTED JULY 9, 1907.

S. K. DENNIS.
WAGON RUNNING GEAR.
APPLICATION FILED FEB. 6, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

SAMUEL K. DENNIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO INTERNATIONAL HARVESTER COMPANY, A CORPORATION OF NEW JERSEY.

WAGON RUNNING-GEAR.

No. 859,209.

Specification of Letters Patent.

Patented July 9, 1907.

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To all whom it may concern:

Be it known that I, SAMUEL K. DENNIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wagon Running-Gear, of which the following is a specification.

My invention relates to wagon running gear having the larger members thereof built up of thin steel sections having a substantially tubular form, and the object is to so construct said members that they will have a maximum degree of strength to withstand the heavy strains to which said parts are submitted, and a general form resembling the ordinary wooden members serving a like purpose. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 represents a rear elevation of part of a wagon running gear embodying my invention; Fig. 2 is a cross section on line A—B of Fig. 1; Fig. 3 is a cross section on line C—D of Fig. 1; Fig. 4 is a cross section on line E—F of Fig. 1; Fig. 5 is a cross section on line I—J of Fig. 1; and Fig. 6 is a cross section on line G—H of Fig. 1.

Similar reference numerals denote similar parts throughout the several views.

1 represents one of the main members of the running gear commonly called an axle, 2 is a secondary or bolster member arranged in the same vertical plane with the axle, and 3 represents spacing blocks inserted between the two members. The two members are substantially tubular, and each comprises a pair of U-shaped bars, the bars being designated by the numeral 4 and arranged in tubular relation, as shown in Figs. 2 and 3. The bars are secured in the position described by means of tubular extensions 5 and 6 at opposite ends of the upper and lower tubular members and forming stake supports and axle skeins, respectively, and having spacing and securing means engaging with opposite sides of each U-shaped bar, as designated by numerals 7 and 8, respectively, and other spacing and securing means, as designated by the numerals 9 and 10, disposed in an opposite direction and engaging with the other sides of the tubular members. Supplemental spacing members 11 are arranged intermediate the ends of the axle and bolster, as shown in Fig. 1, and have what is commonly called a double-cross form, comprising vertical tubular members 12, and a single horizontal member 13; the vertical members engaging with opposite sides of each of the U-shaped bars, and the horizontal member with the remaining sides of the built up tubular member. The securing means, or bolts 8, engage opposite sides of the U-shaped bars, the double portions of the spacing members 11, and the spacing blocks 3 and securely

hold the axle and bolster together in operative relation. The stake supports 5 and the axle skeins 6 are provided with inwardly projecting strengthening ribs 14 that form substantially a continuation of the side members of the U-shaped bars 4. For convenience of manufacture, the tubular extensions 5 are made of separable sections and have the bars 4 secured to their inner ends by means of rivets 15, and the two sections are secured together by means of a rivet or bolt 16.

Vertical portions 17, integral with the extensions, form sockets for the stakes 18. The stakes are made of bars having a T-form, and the web of one leg is notched in a manner permitting the stakes to be adjusted vertically and they are secured in position by means of bolts 19.

What I claim as my invention, and desire to secure by Letters Patent, is:

1. A running gear for wagons comprising, in combination, a plurality of substantially tubular members, one or more of said members comprising a pair of U-shaped bars secured together in tubular relation by means of tubular extensions at opposite ends thereof, said extensions having oppositely disposed spacing and securing means engaging said bars.

2. A running gear for wagons comprising, in combination, a plurality of substantially tubular members, one or more of said members comprising a pair of U-shaped bars secured together in tubular relation, said securing means comprising one or more spacing members, said spacing members having a double-cross form, with securing means engaging opposite sides of each of said U-shaped bars and the double portion of said spacing members and other securing means engaging the remaining sides of the U-shaped bars of the tubular members and the single portion of the spacing members.

3. A running gear for wagons comprising, in combination, a plurality of substantially tubular members, one or more of said members comprising a pair of U-shaped bars secured together in tubular relation by means of tubular extensions at opposite ends thereof, said extensions having inwardly projecting strengthening ribs forming substantially a continuation of the side members of the U-shaped bars.

4. A running gear for wagons comprising, in combination, a pair of substantially tubular members arranged in the same vertical plane with spacing blocks therebetween, each of said tubular members comprising a pair of U-shaped bars secured together in tubular relation, said securing means comprising one or more spacing members, said spacing members having a double-cross form, with securing means engaging opposite sides of each of said U-shaped bars of each of said tubular members, together with the double portion of said spacing members and said spacing blocks in a manner securing said tubular members in fixed relation, and securing means engaging the remaining sides of each tubular member and the single portion of the double-cross spacing members.

SAMUEL K. DENNIS.

Witnesses:

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