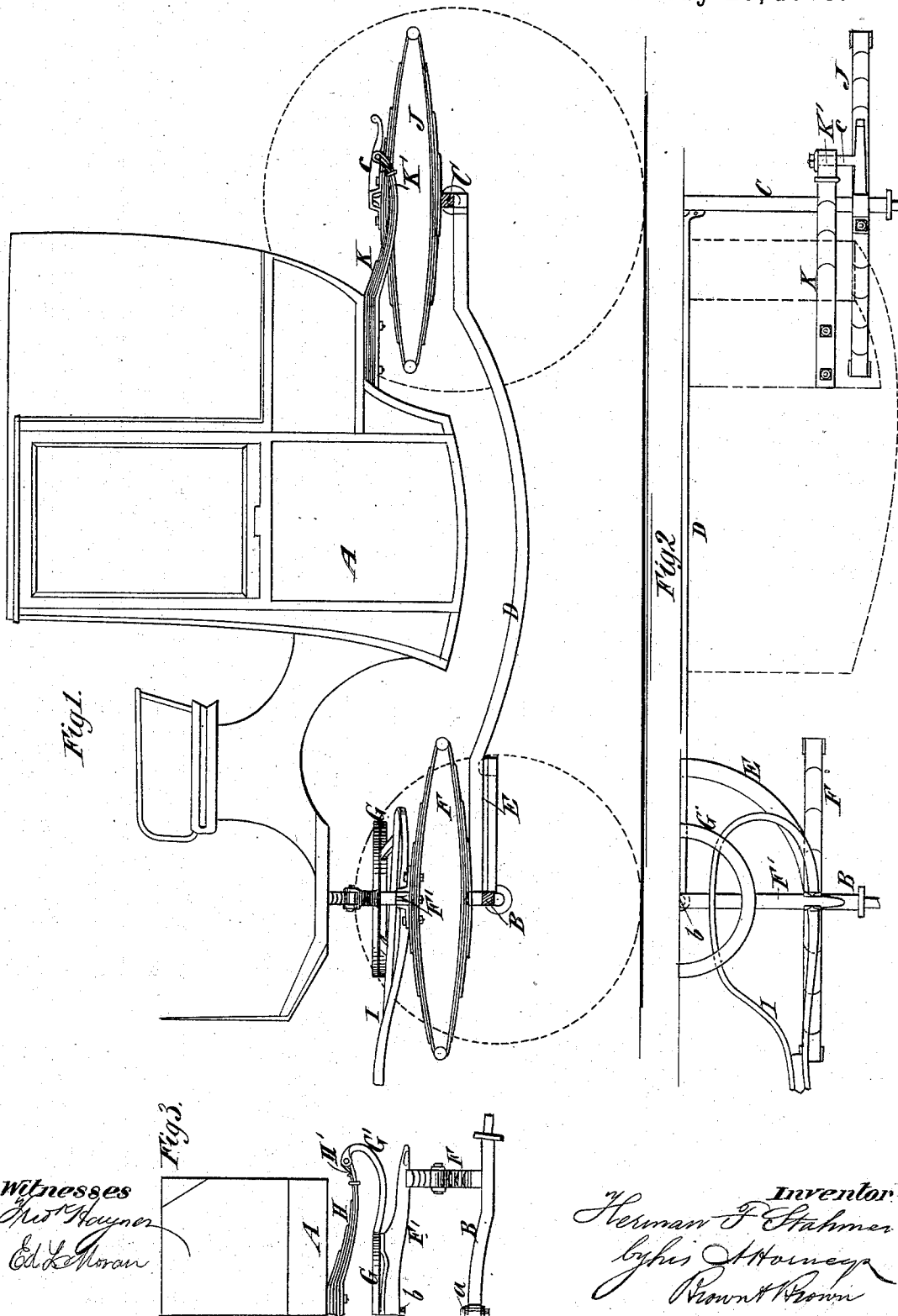


(No Model.)

H. F. STAHLER.
COACH.

No. 278,463.

Patented May 29, 1883.



Witnesses

Wm. H. Hays
Edw. L. Moran

Inventor
Herman F. Stahl
By Wm. H. Hays
Edw. L. Moran

UNITED STATES PATENT OFFICE.

HERMAN F. STAHLER, OF NEW YORK, N. Y.

COACH.

SPECIFICATION forming part of Letters Patent No. 278,463, dated May 29, 1883.

Application filed October 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, HERMAN F. STAHLER, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Coaches, of which the following is a specification.

The objects of my invention are to provide a more easily riding coach and to lessen the sound produced in running, which is annoying to the occupant of the coach.

The invention consists in the combination, in a coach, of a fifth-wheel provided with arms extending therefrom in opposite directions, a spring or springs connected with said arms, and a body the front end of which is supported by said spring or springs.

The invention also consists in the combination, with the front and rear axles of a coach and a reach extending between them, of a fifth-wheel connecting the reach with the front axle, springs supported on the axle, an upper fifth-wheel supported by said springs and provided with arms extending in opposite directions, and a spring or springs connected with said arms and supporting the forward end of the body. In the above arrangement two king-bolts are used, one for each fifth-wheel.

In the accompanying drawings, Figure 1 represents a side view of such parts of a coach as are necessary to illustrate my invention, the axles being in section. Fig. 2 represents a plan of one longitudinal half of the running-gear, the body being removed; and Fig. 3 represents a front elevation of one longitudinal half of the coach.

Similar letters of reference designate corresponding parts in all the figures.

A designates the body, and B C respectively designate the front and rear axles.

D designates a reach, connected rigidly to the rear axle in the usual way, and connected to the front axle by a fifth-wheel, E, and king-bolt a.

Upon the front axle, B, are secured two elliptical springs, F, of common construction, and surmounting them is a cross-bar, F'.

Above the cross-bar F' is mounted a fifth-wheel, G, and b designates the king-bolt thereof, passing through said cross-bar. The upper fifth-wheel, G, differs from those commonly used, in that its upper part has arms G' pro-

jecting from it upward and outward in opposite directions, one of said arms being clearly shown in Fig. 3.

H designates a spring extending transversely to and secured to the under side of the front portion of the body, and having its ends secured to the arms G' by means of a leather brace, H'. In lieu of the spring H, a spring or springs of other form may be used. The use of the springs above and below the upper fifth-wheel conduces to the easy riding of the coach, and as the reach has a fifth-wheel connection with the front axle the latter is enabled to turn readily.

I designates the futchells, to which the shafts are secured in the usual way.

Upon the rear axle, C, are mounted elliptical springs J.

K designates leaf-springs, which are secured at one end to the rear portion of the body A, and are supported upon leather braces K'. The leather braces are attached to irons c, which project from the springs J, and thereby is the body supported. The leather braces K' and irons c form a convenient means of connecting the springs K with the springs J; but springs of other forms may be used, and may be connected together in any suitable way. The arrangement of springs at the back, as shown, conduces to easy riding, and by my invention I produce a coach which may be run with little noise, and which is therefore very desirable.

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

1. In a coach, the combination of a fifth-wheel provided with arms extending in opposite directions, a spring or springs connected with said arms, and a body the front of which is supported by said spring or springs, substantially as and for the purpose described.

2. In a coach, the combination, with the front and rear axles and a reach extending between them, of a fifth-wheel connecting the reach with the front axle, springs supported on the axle, an upper fifth-wheel supported by said springs and provided with arms extending in opposite directions, and a spring or springs connected with said arms and supporting the forward portion of the body, substantially as and for the purpose described.

3. In a coach, the combination, with the front and rear axles and a reach extending between them, of a fifth-wheel and king-bolt connecting said reach with the front axle, springs supported on said front axle, and an upper fifth-wheel and king-bolt between said springs and the forward portion of the body, substantially as and for the purpose described.

4. The combination of the front and rear

axles, B C, the reach D, the fifth-wheel E, and king-bolt *a*, the springs F, the upper fifth-wheel, G, provided with arms G' and the king-bolt *b*, the spring H, and the body A, all arranged substantially as herein described.

HERMAN F. STAHLER.

Witnesses:

FREDK. HAYNES,
ED L. MORAN.