

(No Model.)

J. GLEICH.
WAGON SEAT.

No. 245,478.

Patented Aug. 9, 1881.

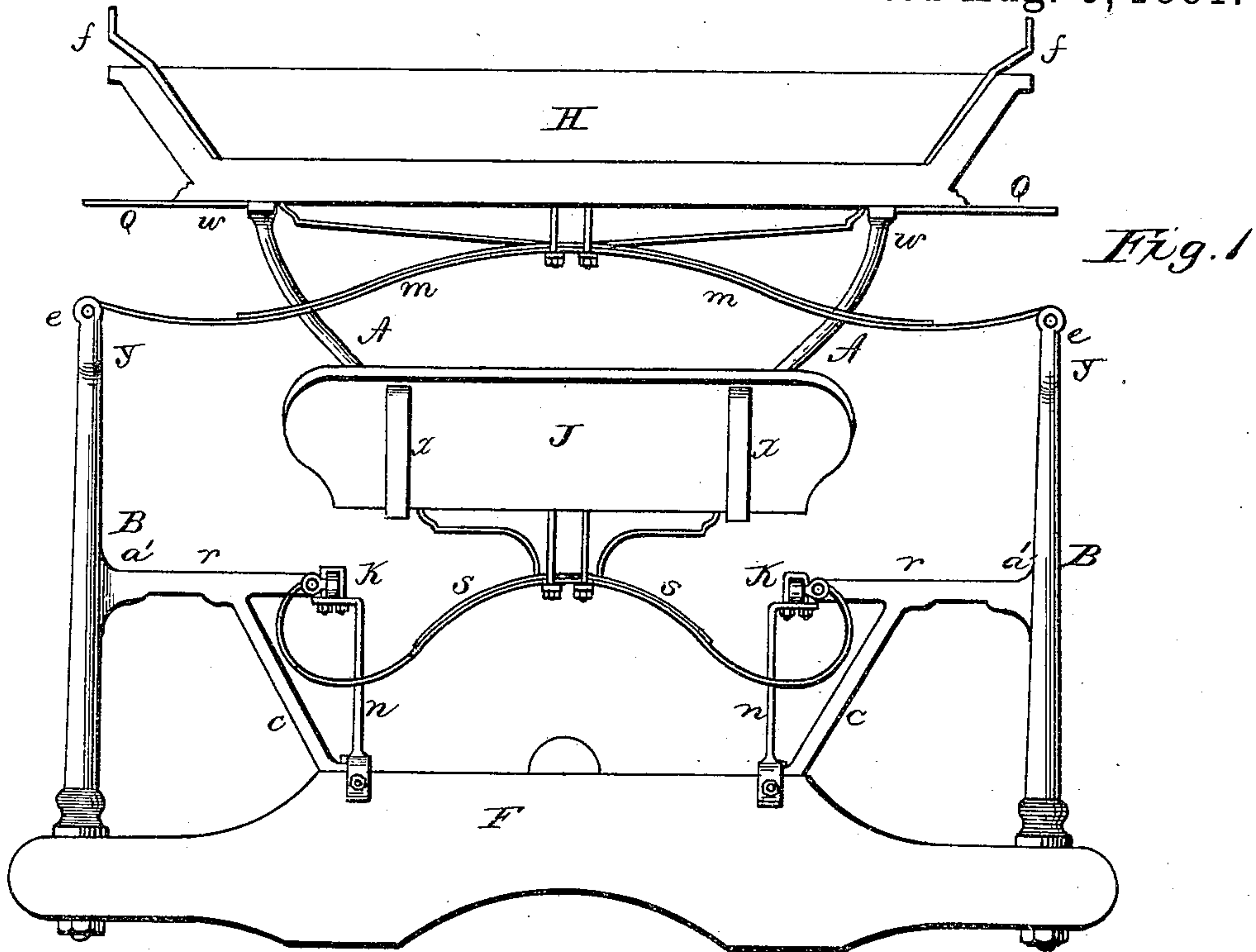


Fig. 2.

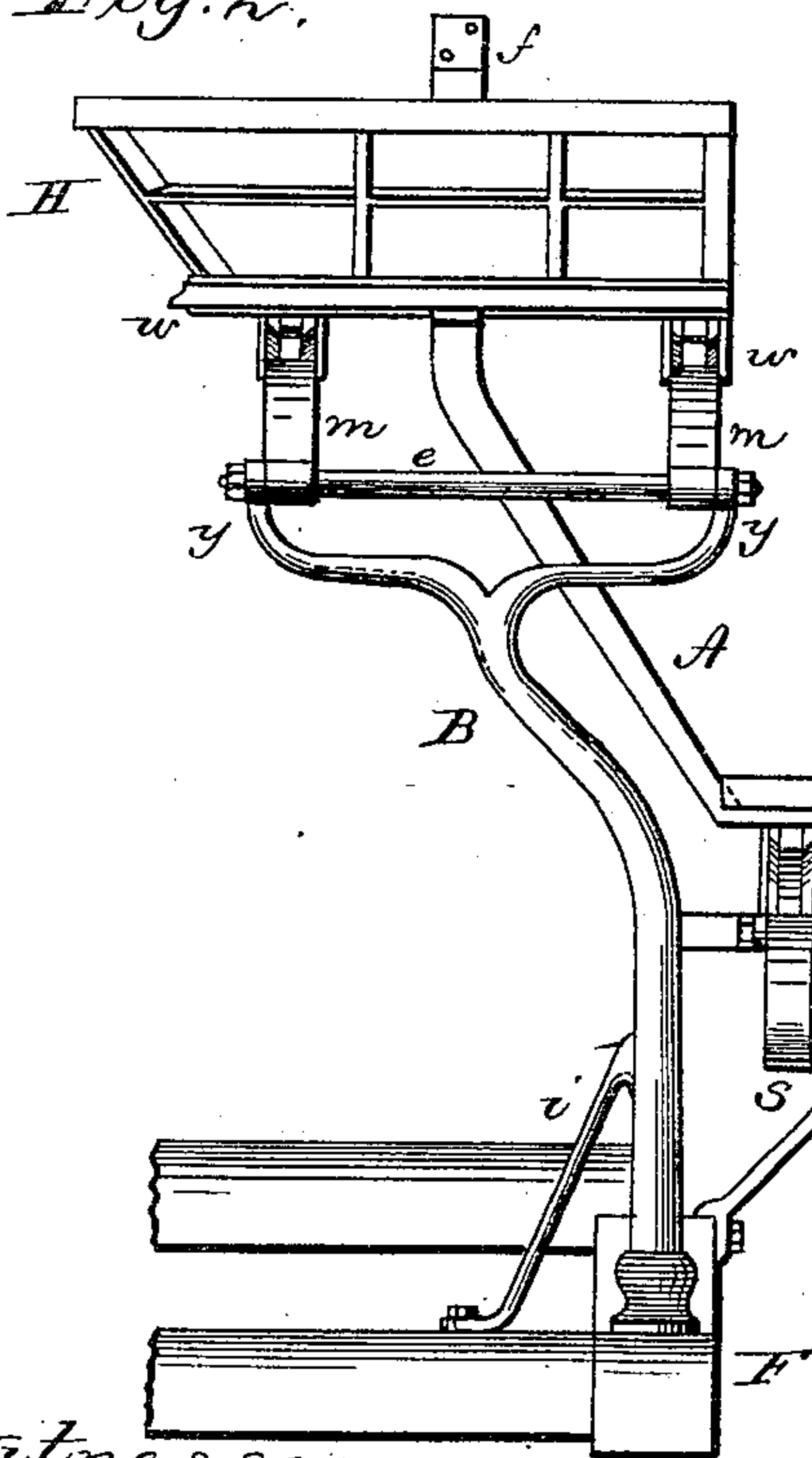
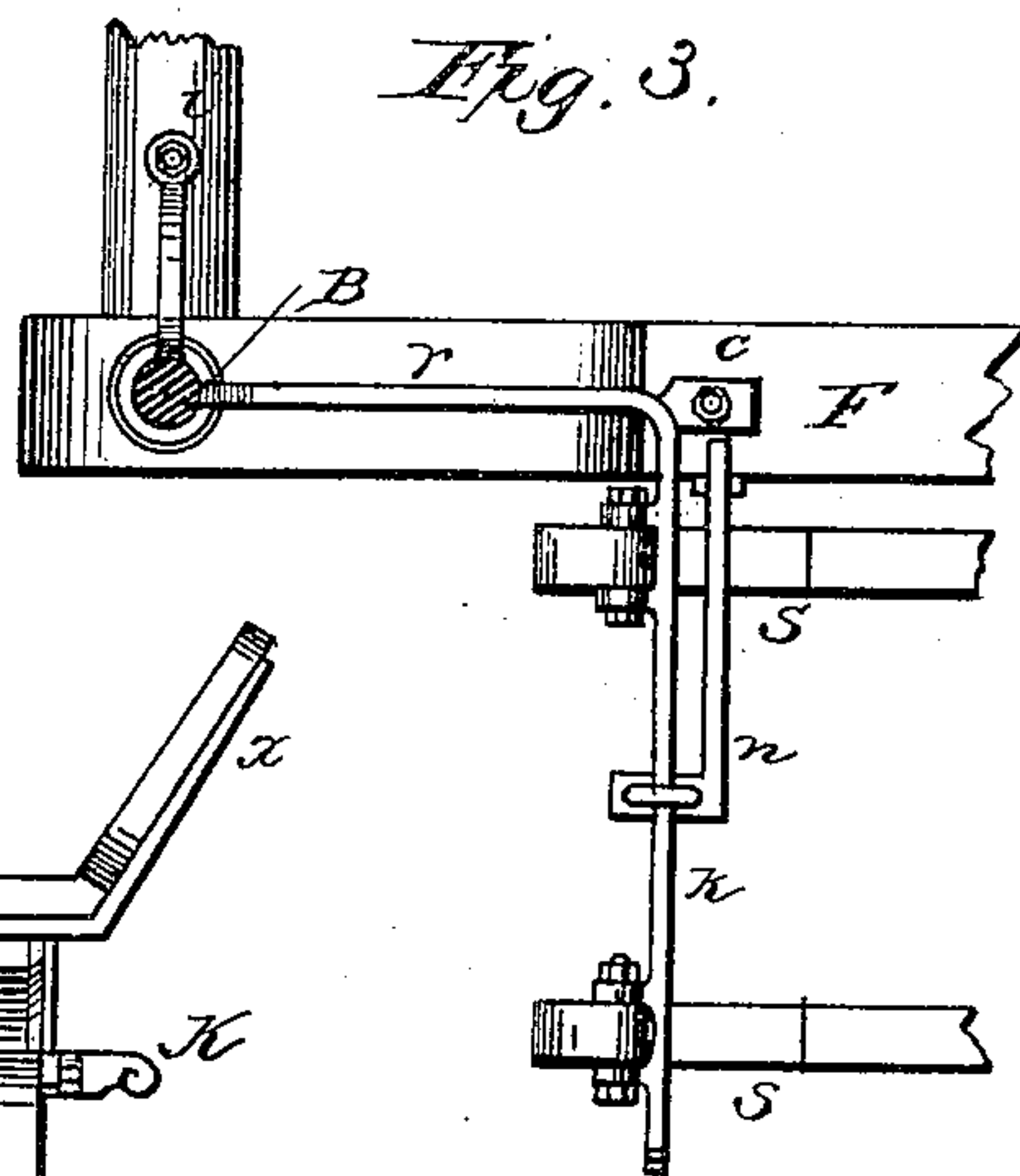


Fig. 3.



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UNITED STATES PATENT OFFICE.

JACOB GLEICH, OF COLUMBUS, OHIO.

WAGON-SEAT.

SPECIFICATION forming part of Letters Patent No. 245,478, dated August 9, 1881.

Application filed April 18, 1881. (No model.)

To all whom it may concern:

Be it known that I, JACOB GLEICH, of Columbus, Ohio, have invented certain new and useful Improvements in Wagons, of which the following is a specification.

My invention relates to wagons made with elevated spring-seats and springs under the foot-boards, and more especially adapted to wagons commonly called "beer-wagons," as used by brewers and others.

The object of my invention is to construct wagons with spring-seats and spring foot-boards, so that the seat-springs and foot-board springs will operate in unison and on each other. This I do by forging iron seat-supports, which are fastened to the bottom, one on each side of the wagon, at one end, and the other end of each support is forked, each fork terminating in eye-bearings to receive the rod or bolt which passes through the semi-elliptic springs of the seat, and by forging an arm on each seat-support, with ears for receiving the eyes of the foot-board springs, to which the foot-board springs are attached by bolts passing through the bolt-holes in the eyes and ears, and then connecting the seat and foot-board with braces, so that when either the seat or foot-board springs are operated the others must operate in unison, and in supplying these braces with forged arms for supporting the top.

In the accompanying drawings I have illustrated my invention.

Figure 1 represents a front elevation. Fig. 2 represents a side elevation of sufficient of a wagon to show my invention. Fig. 3 is partial plan view of the arm *r k*.

Similar letters of reference are used in all figures.

F represents front part or end of a body of a wagon.

B B represent the iron seat-supports, on which the seat H is supported. The lower ends of the supports are fastened to the bottom, one on each side of the wagon, by means of bolts or otherwise, and are braced with braces *i i*, Fig. 2. The upper end of each support B B is forked, as shown at *y y*, Fig. 2, each fork terminating in eye-bearings to receive the rod or bolt *e*, which passes through the eyes of the semi-elliptic springs *m m* of the seat H. Each seat-support B has an arm, *r k*, forged on, as

represented at *a' a'*, Fig. 1. These arms extend toward the center of the wagon any desired distance, to wit, about one-third the width of the wagon, (see Fig. 1,) then form an elbow with the end *k*, Fig. 2, extending forward parallel with the plane of the foot-board, on which the foot-board springs *s s* are fastened by means of ears forged on the part *k* of the arms *r k*, which receive the eyes of the semi-elliptic foot-board springs *s s*, to which the foot-board springs *s s* are fastened by bolts passing through the bolt-holes in the said eyes and ears, as shown in Fig. 2, and more fully shown in Fig. 3, where, looking down on the seat-support B, the part *r* is shown as extended toward the center of the wagon, then forming an elbow. The part *k* forms the part to which the springs *s s* are attached.

n is a brace to support the part *k* of the arm *r k*.

c, Fig. 1, is a brace to support the part *r* of the brace *r k*.

The arms *r k* thus formed not only act as supports for the springs *s s*, but form a platform or guard under the foot-board, and in case of accident caused by the breaking of the springs would prevent the foot-board from giving entirely away, and thus prevent the driver from falling.

I do not limit myself to the exact shape of the braces B B, forks *y y*, and arms *r k*, for they can be forged in many desirable shapes to suit the tastes and fancies of mechanics and others; but I think when constructed as herein shown and described all the ends desired are obtained. These ends are the main features embodied in the first part of my invention.

H represents an ordinary wagon-seat, secured to the semi-elliptic springs *m m* in the usual way, and connected to the seat-supports B B, as hereinbefore shown and described.

J represents a foot-board, to which the semi-elliptic springs *s s* are attached in the usual way.

A A represent braces, attached at one end to the bottom of the seat H by means of bolts or other device, and shaped so that they form the platform for the foot-board J, and to which the foot-board is fastened by means of rivets or other device. The braces A A connect the seat H and the foot-board J, and form the

combination between the seat-springs *m m* and foot-board springs *s s*, and the springs *m m* and *s s* are thereby operated in unison. One set cannot operate without giving the same motion to the other set, and are thereby equalized. I thereby secure an equal movement of seat and foot-board, which could not be obtained without the braces *A A*. The strain and weight being shared alike by the seat and foot-board springs, they can be made of like temper and elasticity. I thereby overcome the difficulties heretofore experienced by drivers of wagons with stationary foot-boards or wagons with foot-boards with springs not operating in unison with the seat-springs. A further advantage in using the braces *A A* is in the event either a seat spring or springs or foot-board spring or springs break the braces will support and take the place of the part broken, and thereby prevent the seat or foot-board from giving entirely away and precipitating the driver.

I prefer two springs under the seat and two under the foot-board, and they may be either elliptic, semi-elliptic, or any other desired shape or style of spring; but nearly the same result can be obtained by using my braces in combination with one, two, or more springs under the foot-board and under the seat, and one brace can be used in combination with one, two, or more springs under the foot-board and seat; but in a perfectly-operating combination

spring foot-board and spring-seat I prefer the kind herein shown and described.

I am aware that the combination, broadly, of a spring-seat and spring foot-board the springs of which are so arranged that in operation they tend to sustain and equalize each other is old; but

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

1. The combination, in a wagon, of a spring-seat, a spring foot-board, brace or braces *A*, and supports *B*, by which the said seat and foot-board are connected, mutually supported, and the action of their springs equalized, substantially as described.

2. The seat-supports *B*, provided with forked ends *y*, and arms *r k*, substantially as described.

3. The combination of the foot-board, supports *B*, and arms *r k*, substantially as described.

4. The combination of the seat springs and supports *B*, connected by the bolts or rods *e*, substantially as described.

5. The combination of the spring-seat and spring foot-board, braces *A*, supports *B*, and the intermediate braces and arms, *r k*, *c*, *n*, and *i*, substantially as described.

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Witnesses:

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