

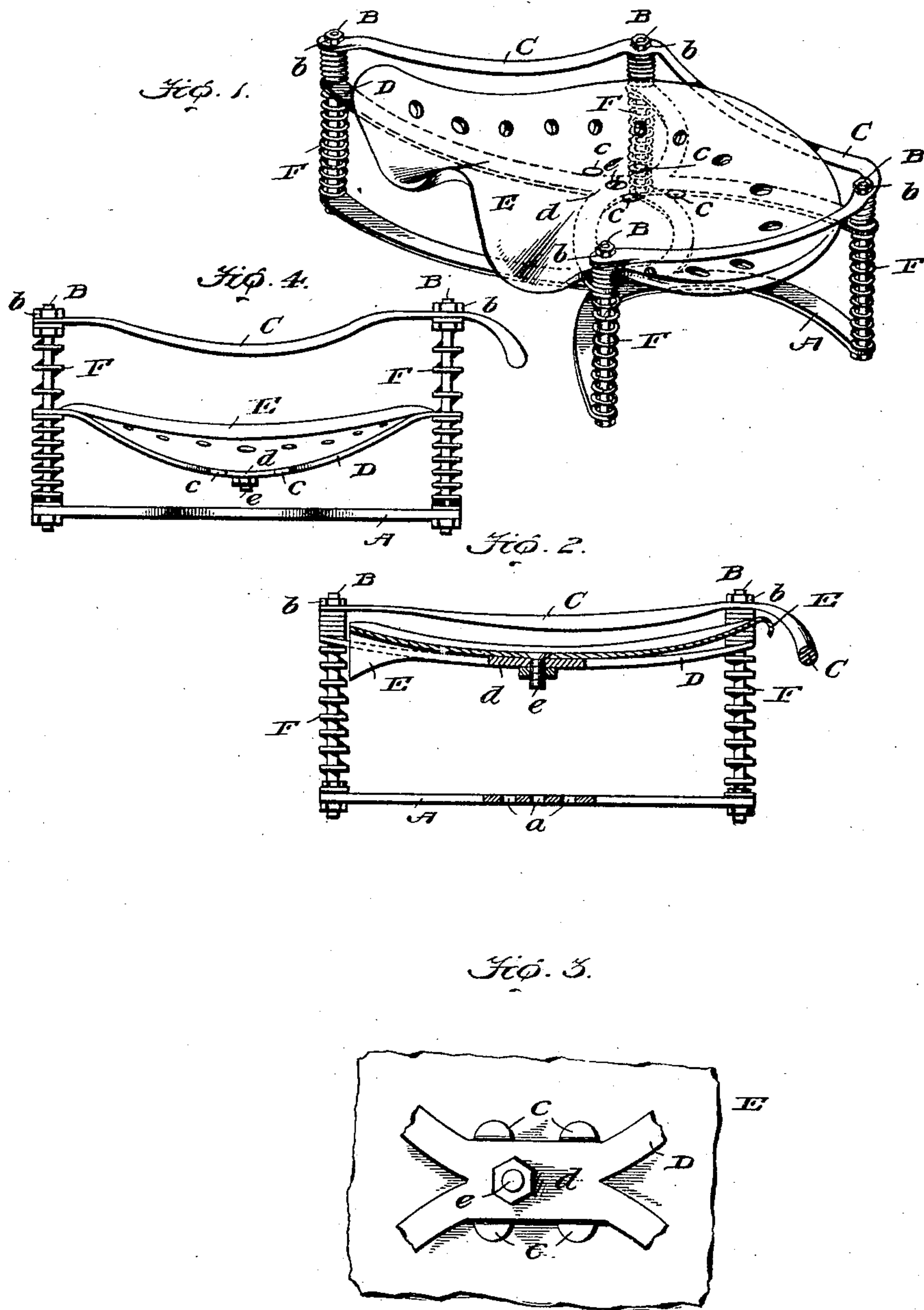
No. 765,946.

PATENTED JULY 26, 1904.

J. J. WISDA.
SPRING SEAT.

APPLICATION FILED MAY 18, 1904.

NO MODEL.



Inventor

Witnesses

Wm. C. O'Leary
N. C. O'Leary

By

J. J. Wisda.
James J. Shuby

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH J. WISDA, OF DEFIANCE, OHIO.

SPRING-SEAT.

SPECIFICATION forming part of Letters Patent No. 765,946, dated July 26, 1904.

Application filed May 18, 1904. Serial No. 208,547. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. WISDA, a citizen of the United States, residing at Defiance, in the county of Defiance and State of Ohio, have invented new and useful Improvements in Spring-Seats, of which the following is a specification.

My invention pertains to spring-seats, more particularly spring-seats for vehicles; and it has for its object to provide a spring-seat calculated to comfortably support a person irrespective of the roughness of the road over which a vehicle is passing and one which is strong and durable and is therefore well adapted to withstand the rough usage to which such devices are ordinarily subjected.

The invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the spring-seat constituting the present and preferred embodiment of my invention. Fig. 2 is a vertical central section of the same. Fig. 3 is an enlarged detail inverted plan view illustrating the manner in which the vertically-movable frame of my novel seat is connected to the seat proper, and Fig. 4 is a view illustrative of the action of the springs when the seat proper is depressed by the weight of a person.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is the base of my novel seat, which may be of any construction compatible with the purposes of my invention, although I prefer to make it in the form of a spider-frame and to provide it with bolt-holes *a*, so as to adapt it for ready connection to the frame of a cultivator or any other agricultural machine.

B B are upright guide-rods fixed to and rising from the base A at the four corners thereof.

C is a guard-rail disposed at the back and sides of the seat and secured by nuts *b* or other suitable means on the upper ends of the rods B.

D is a vertically-movable frame, prefer-

ably in the form of a spider, which has apertures loosely receiving the rods B, and is adapted to move vertically on said rods, and E is a seat proper, preferably of sheet-metal, arranged on and fixedly connected to the frame D. I prefer in connecting the seat proper, E, to the frame D to provide the seat proper with lugs *c*, which lugs are disposed at the under side of the seat proper and at opposite sides of a central portion *d* of the frame D, Fig. 3, and to pass a bolt *e* through the seat proper and said central portion *d* of frame D, as best shown in Fig. 2.

F F are coiled springs which surround the guide-rods B and are interposed between the base A and the guard-rail C. At an intermediate point in their height, and preferably between their middles and upper ends, the said springs F receive between certain of their whirls the arms of the frame D, as best shown in Figs. 2 and 4. In virtue of this construction it will be observed that when the weight of a person is imposed on the seat proper, E, and said seat proper and its frame D are depressed the portions of the springs F below the seat proper will be compressed and the portions of the springs above said seat proper will be expanded, while when the seat proper is relieved of weight the portions of the springs below the seat proper will expand and the portions of the springs above the seat proper will contract. From this it follows that when the seat proper is depressed it will be cushioned by the compression of the lower portions of the springs and the expansion of the upper portions of the springs, and when the seat is relieved of weight it will be returned to the position shown in Figs. 1 and 2 by the expansion of the lower portions and the compression of the upper portions of the springs and will be cushioned by said upper portions of the springs, and hence prevented, incident to its sudden upward movement, from injuring any of the parts of the construction. It also follows that the several springs F are adapted to operate independent of each other, and hence one spring will serve to cushion one corner of the seat proper or two springs to cushion one side of the seat proper without the other springs being affected.

It will be appreciated from the foregoing that my novel spring-seat is adapted to take up all shock and jar incident to the passage of a vehicle over a rough road or field and is therefore calculated to comfortably support the driver of the vehicle. It will also be appreciated that the spring-seat is adapted to withstand rough usage and weather and that it embodies no delicate parts, such as are likely to get out of order after a short period of use.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

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

1. The combination of a plurality of upright guides, a seat arranged to move vertically between the guides, and coiled springs held by the guides and arranged below and above the seat and in engagement with the same; the springs below the seat being also arranged to be compressed and the springs above the seat being also arranged to be expanded by the depression of the seat.

2. The combination of a plurality of upright guides, coiled springs held by the guides, and a seat arranged to move vertically between

the guides and having portions disposed between and in engagement with intermediate whirls of the springs, whereby when the seat is depressed, the lower portions of the springs will be compressed and the upper portions thereof expanded.

3. The combination of a base, upright guide-rods fixed to and rising from the base, a guard-rail fixed on the upper portions of the said guide-rods, coiled springs surrounding the guide-rods and interposed between the base and the guard-rail, and a seat arranged to move vertically between the guide-rods, and having portions receiving said rods and interposed between and arranged in engagement with intermediate whirls of the springs.

4. The combination of a base, upright guide-rods fixed to and rising from the base, coiled springs surrounding the guide-rods and interposed between the base and a guard-rail fixed on the upper portions of the guide-rods, the said guard-rail, a frame movable vertically and having a central portion *d*, and also having apertured portions loosely receiving the guide-rods and interposed between and arranged in engagement with intermediate whirls of the springs, a seat proper arranged on the vertically-movable frame, and having lugs disposed at opposite sides of the portion *d* of said frame, and a bolt connecting said seat proper and vertically-movable frame.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH J. WISDA.

Witnesses:

E. W. COSTELLO,
C. A. CONSTIEN.