

A. HOSMER.
Carriage-Spring.

No. 4,065.

Patented June 2, 1845.

Fig. 5.

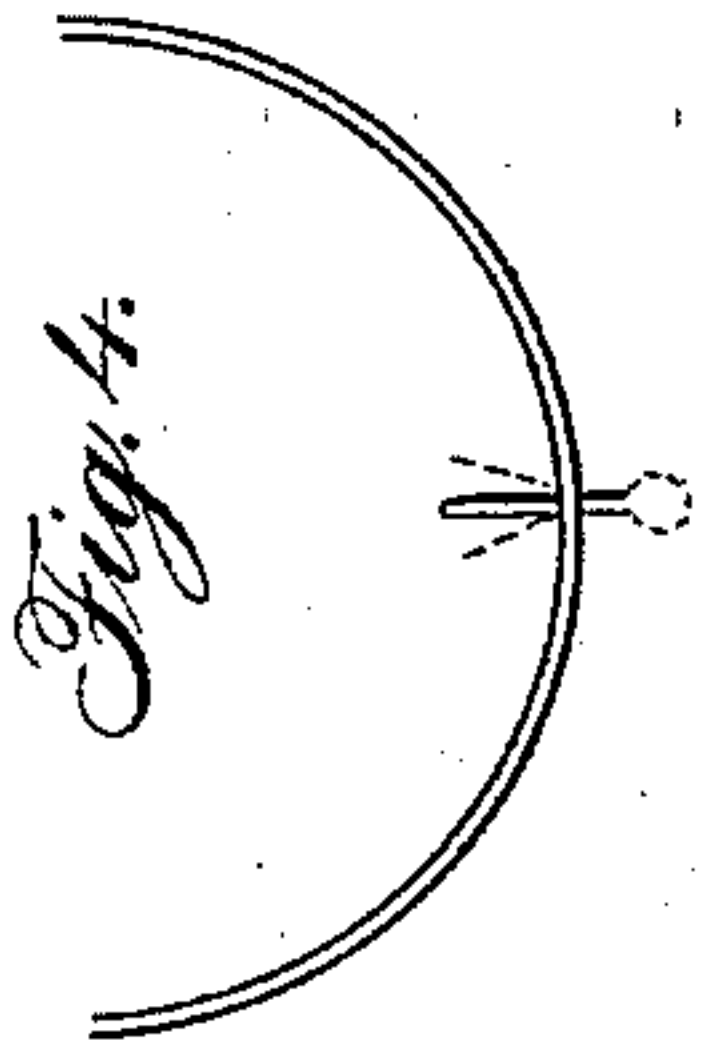
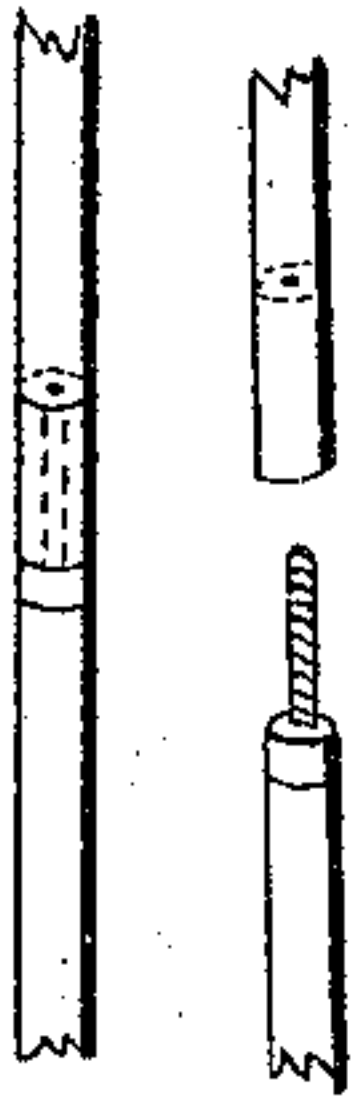


Fig. 2.

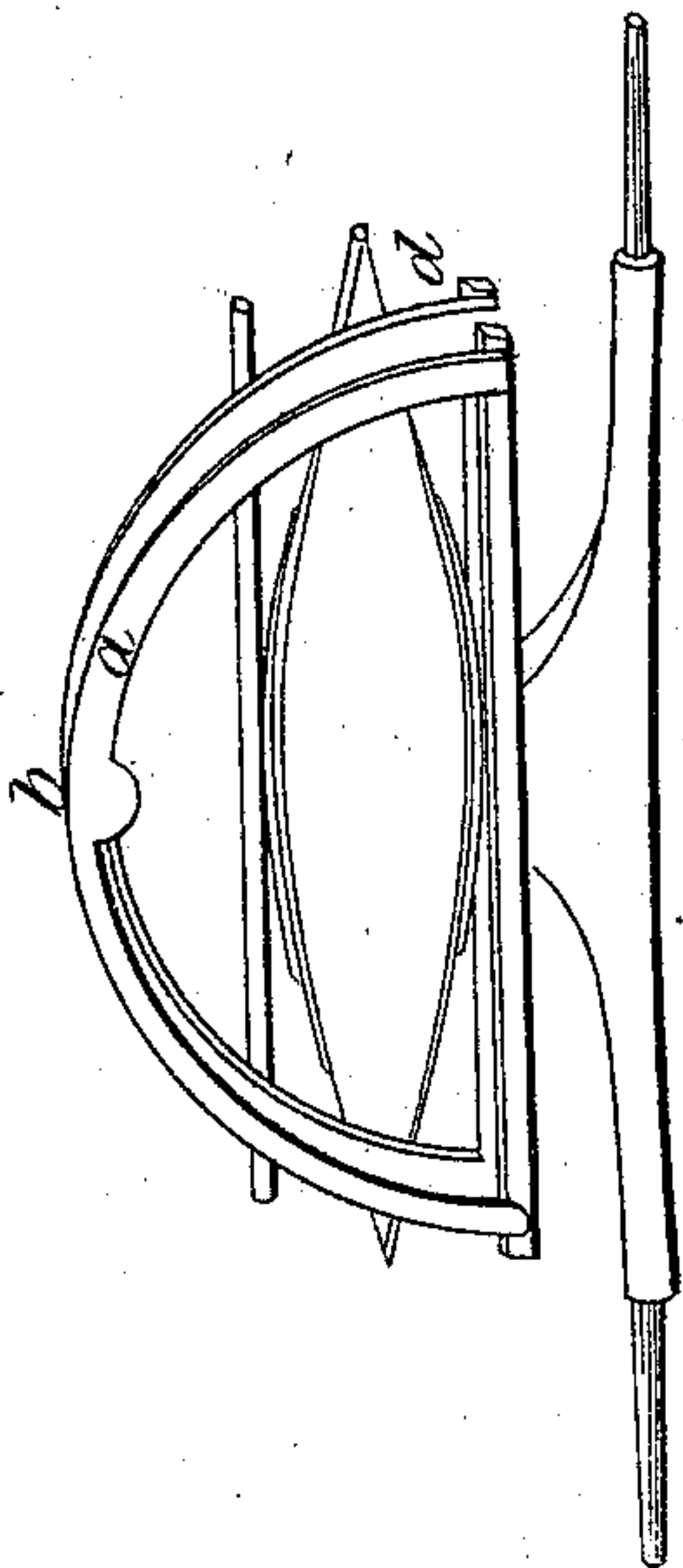


Fig. 3.

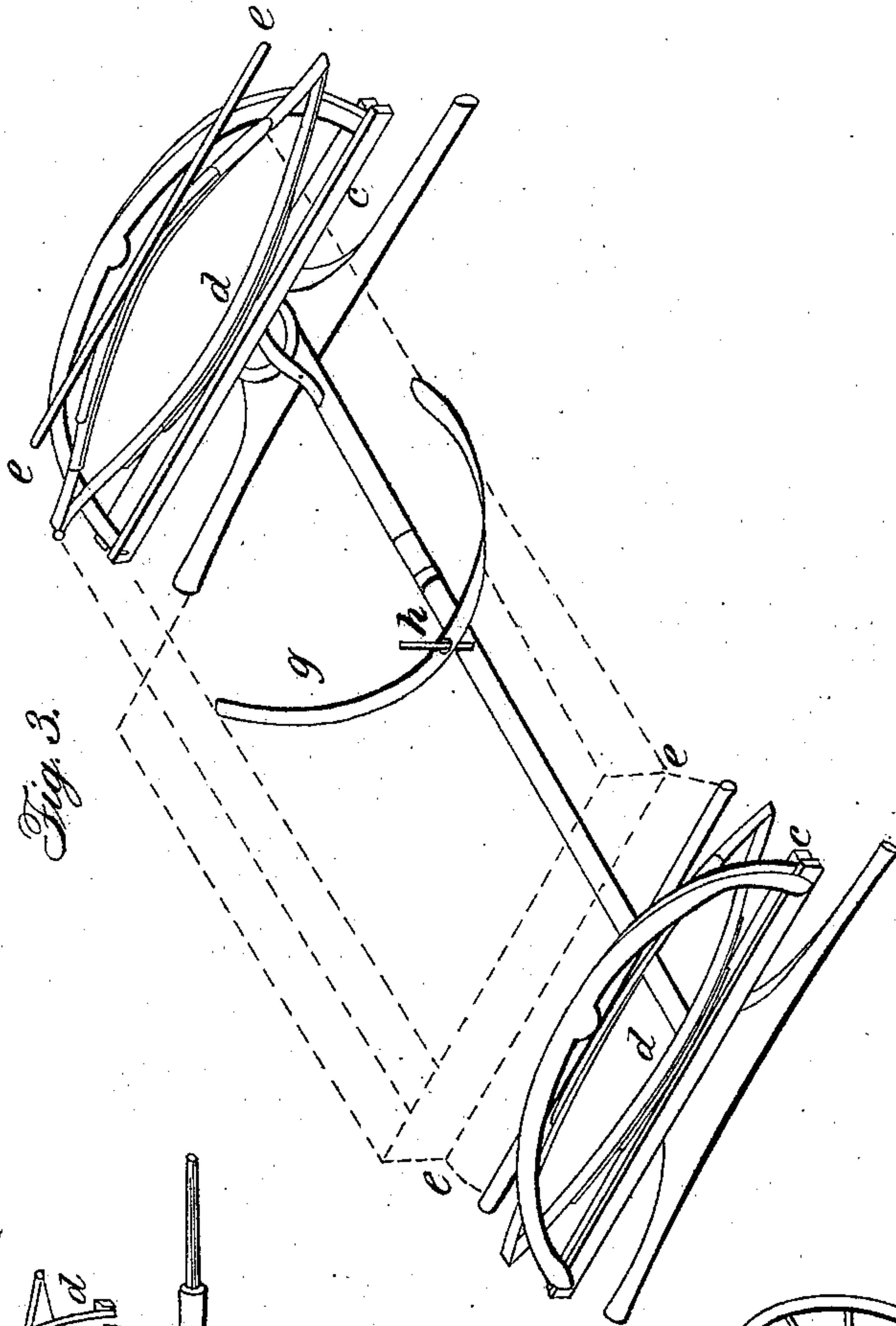
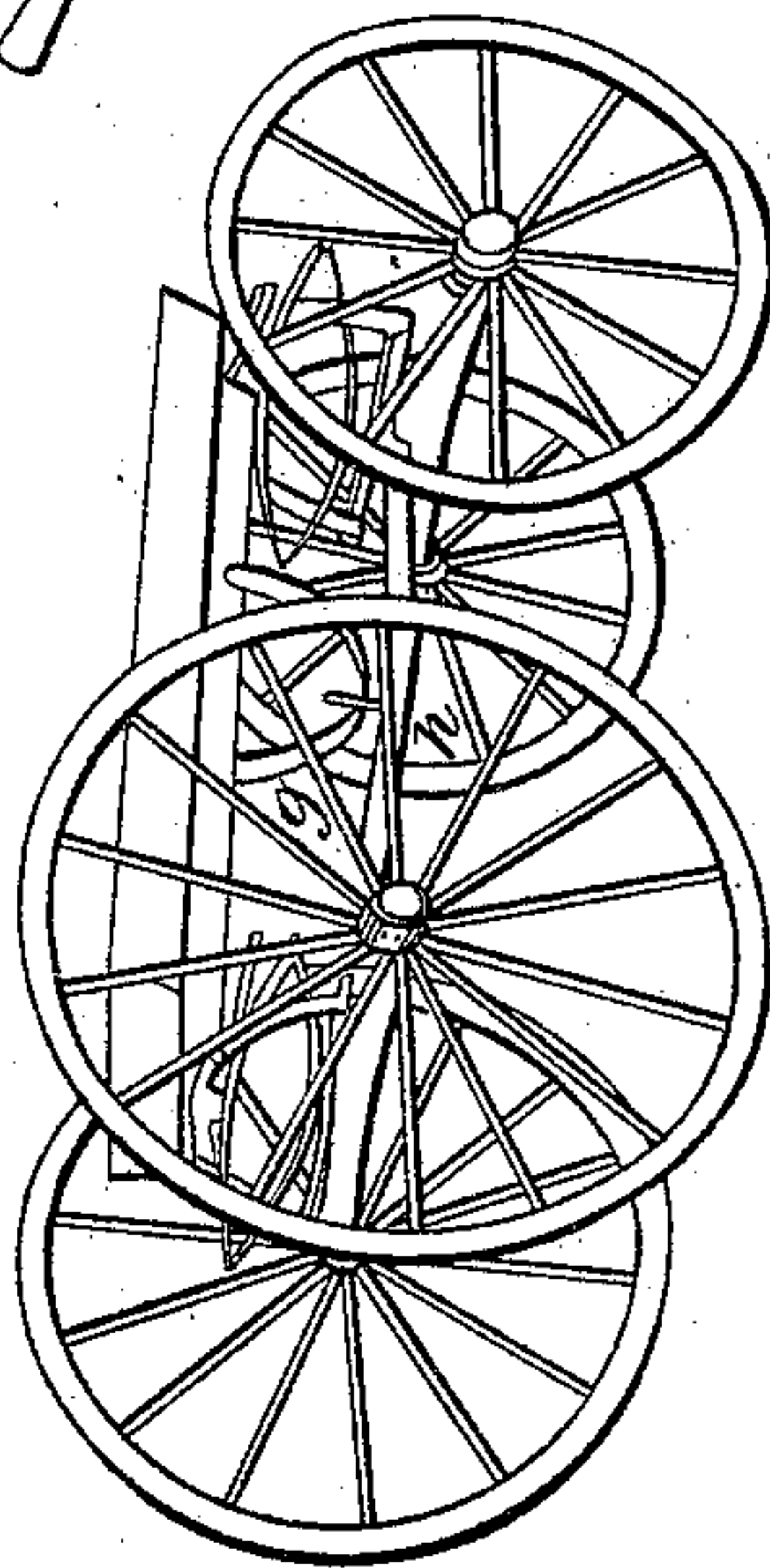


Fig. 1.



UNITED STATES PATENT OFFICE.

ARNOLD HOSMER, OF BATH, OHIO, ASSIGNOR IN PART TO R. R. BONNEY.

HANGING CARRIAGE-BODIES.

Specification of Letters Patent No. 4,065, dated June 2, 1845.

To all whom it may concern:

Be it known that I, ARNOLD HOSMER, of Bath, in the county of Summit and State of Ohio, have invented a new and useful
5 Mode of Suspending the Bodies of Buggies or other Four-Wheeled Carriages or Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of
10 the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view; Fig. 2 a sectional view of one axletree with its arches
15 attached, and Fig. 3 a representation of both axletrees connected by the reach, and showing the manner in which the body or box is attached and suspended.

The several parts of the drawings are
20 referred to by letters of reference, and the different parts more fully explained hereafter.

The nature of my invention consists in
25 suspending the carriage body upon arches which rest upon the axletree, in such a manner as will prevent the rocking of the body or box, while the carriage is passing over uneven ground.

To enable others skilled in the art to
30 make and use my invention, I will proceed to describe its construction and operation.

I construct my carriages in any of the usual forms, and attach to the bolster or
35 rocker of each axletree, an arch of iron or other suitable material, Fig. 2, latter *a*. At the top of this arch is a hole, Fig. 2, letter *b*, through which a bolt passes, of sufficient strength to sustain with safety half of the
40 burden conveyed in the carriage. Upon this bolt is suspended another arch similar in size and strength to the former, the legs of which are bolted to a bar running parallel with the axletree, Fig. 3, letters *c*, *c*, and
45 when thus suspended upon the bolt at Fig. 2, letter *b*, will vibrate to accommodate the motion of the axletree, or in other words will admit either end of the axletree to rise or fall without disturbing the horizontal position of the bar *c*, Fig. 3.

The manner of constructing and attaching
50 the arches to the forward and hind axletree are exactly similar. Consequently, a description of one will suffice for both. The elliptic springs, instead of being bolted to the bolster or rocker as in the common
55 method, is bolted to, and rests upon the cross

bar which is bolted to the legs of the vibrating arch as shown in Figs. 2 and 3, letters
d, *d*, *d*. The body or box of the carriage is fastened to the springs and rests upon them
60 in the common or ordinary manner as indicated in Fig. 3 by the dotted lines and letters *e*, *e*, *e*, *e*.

In order to prevent the carriage body from swaying or swinging latterly, I attach
65 a semicircular hoop of iron, the ends of which are bolted to the sides of the carriage body, with its circle downward, forming an inverted arch immediately under the center of the body, Figs. 1 and 3, letters *g*, *g*. At
70 the center of this circle and immediately over the reach, is a hole, through which an iron pin projects upward from the reach to which it is firmly attached Figs. 1 and 3,
75 letters *h*, *h*. The hole in this semi circle must be larger than the pin or guide, so as to admit of the free and easy motion of the axletree in its elevation or depression in passing over obstructions, and a corresponding
80 variation of the pin or guide from a perpendicular position, or in other words, the hole in the inverted arch must be large enough to admit of free motion without
85 cramping. The different positions which this pin or guide assumes or takes, is shown in Fig. 4.

For the purpose of giving the forward
axletree a more free and easy motion than it can have with the common method of coupling, I construct a swivel in the reach about
90 half way between the pin or guide, and the forward axletree. This swivel is formed of iron, one portion of the reach terminating in a screw bolt, and the part which joins it, in a nut, and the parts are screwed together
95 while the forward axletree is separate from the reach. This swivel is represented in the drawings by Fig. 5, both in its separate and united condition.

What I claim as my invention and desire
100 to secure by letters patent, is—

The combination of the three following particulars: 1, the suspension of the carriage body or box upon vibrating arches; 2, the
105 pin or guide and its appendage the semicircular hoop, and 3, the swivel in the reach all of which as herein described.

ARNOLD HOSMER.

Witnesses:

THOMAS WALL,
JOHN BRAINERD,