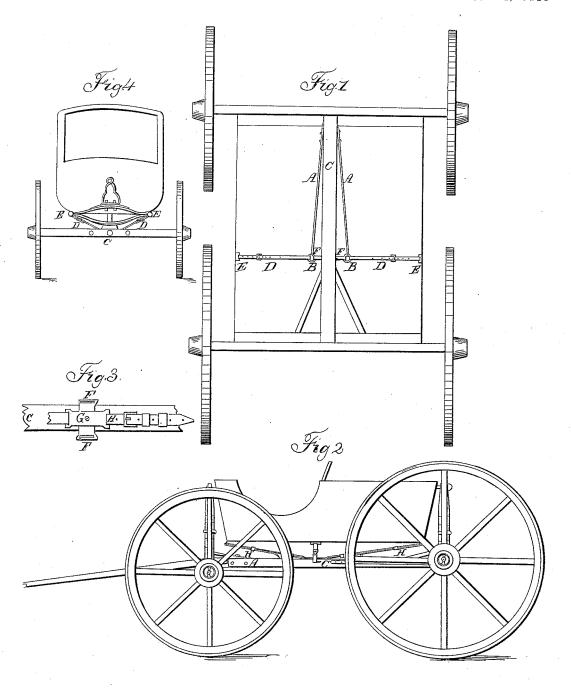
## A. VALLERCHAMP.

Carriage-Spring.

No. 1,362.

Patented Oct. 12, 1839



## UNITED STATES PATENT OFFICE.

AZIMA VALLERCHAMP, OF McDOWELLSVILLE, PENNSYLVANIA.

MANNER OF HANGING CARRIAGE-BODIES.

Specification of Letters Patent No. 1,362, dated October 12, 1839.

To all whom it may concern:

Be it known that I, AZIMA VALLERCHAMP, of McDowellsville, Columbia county, State of Pennsylvania, have invented a new and useful Improvement in Hanging Carriage-Bodies, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1, view of the under side of the 10 carriage; Fig. 2, side view; Fig. 3, top view of the perch showing the plate with four loops: Fig. 4, back view.

loops; Fig. 4, back view. Similar letters refer to similar parts in the several figures. The nature of this invention and improvement consists in a certain new and useful combination and arrangement of springs fastened to the perch of the carriage and straps and buckles attached to said springs 20 and to the under side of the carriage body when arranged in a pendulum or self-balancing manner on the elliptic or other springs for preventing the body swinging too far transversely, the longitudinal swing-25 ing being prevented by straps attached to the front and hind ends of the carriage body and to the upper side of the perch. When the carriage is furnished with only one seat there are to be two springs A A, each of 30 which is made flat with an aperture and ring B at one end, the other end being perforated with round apertures for screws or rivets which fasten said spring to the side of the perch C near the forward axle tree, 35 the spring extending back, so as to bring the ring B immediately under the seat. The straps D which connect said spring to the carriage body are attached to the rings and extend obliquely upward and pass 40 through loops or staples E at the lower edges of the body under the ends of the seat, being furnished with buckles for bracing the body. There are two other straps F F for preventing the springs being ex-45 tended too far from the perch to endanger their being broken by the transverse swinging of the body, which straps pass through loops or eyes in the sides of the horizontal

plate G fastened to the top of the perch and extend through rings attached to the springs 50 and are furnished with buckles for limiting the outward movement of the springs. The plate just mentioned has two other eyes or loops on the sides thereof toward the forward and hind ends of the carriage, through 55 which are passed straps H extending through staples in the front and rear ends of the body and have buckles for bracing it and preventing the longitudinal movement which would bring the body against the 60 elliptic springs and injure them. This plate containing the four eyes or loops for the two transverse and the two longitudinal straps is represented more clearly at G in Fig. 3 and is fastened to the upper side of the 65 perch by screws or rivets.

By the before described arrangement of springs and straps attached to the perch under the body for regulating the transverse swinging or pendulous movement of 70 the carriage body the self-adjusting or pendulous mode of hanging the body may be accomplished with safety to the carriage and ease to the rider, running gears, horse, &c.

In carriages carrying two seats it may be 75 necessary to have two other springs arranged on the same principle between those just described and the perch, so that they shall extend back sufficiently far to bring the rings to which the oblique straps are 80 attached immediately under the hind seat.

Spiral springs may be substituted for the straight springs on the perch if preferred. The invention claimed and desired to be

secured by Letters Patent consists in—

The combination and arrangement of the springs and check straps attached to the perch of the carriage and to the under side of the pendulous or self-adjusting carriage body for regulating the transverse movement of the same as before described.

## AZIMA VALLERCHAMP.

Witnesses:
WM. P. ELLIOT,
EDMD. MAHER.