H. F. METZLER.

SPRING HORSE.

No. 46,529. Patented Feb. 21, 1865.

Fig. 1

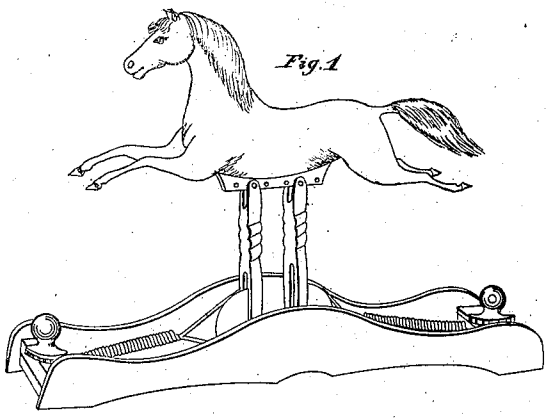


Fig. 4

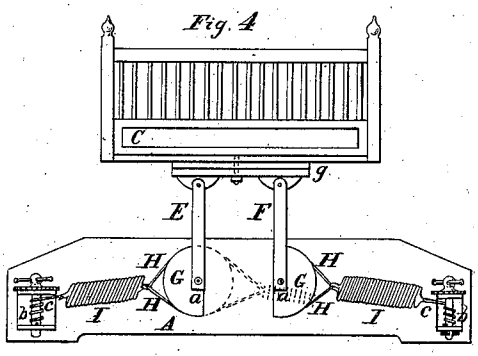


Fig. 4'

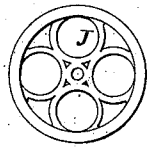


Fig. 2.

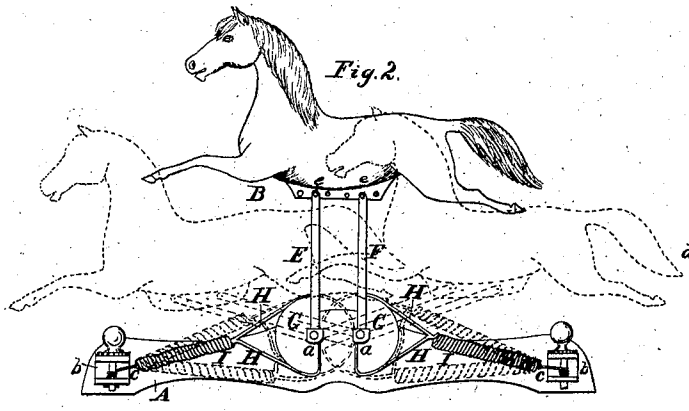


Fig. 5.

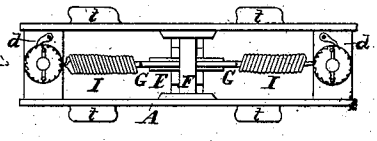


Fig. 3

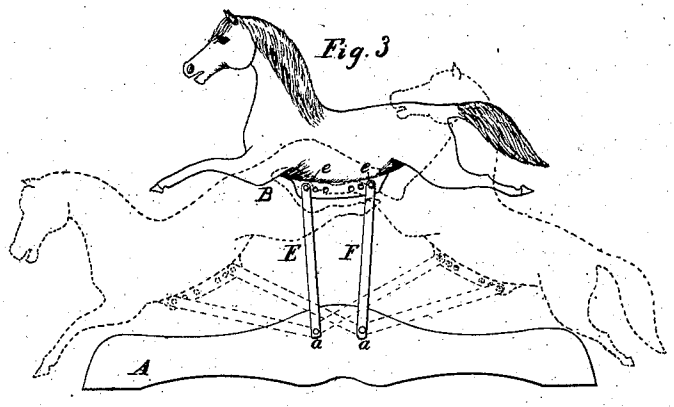
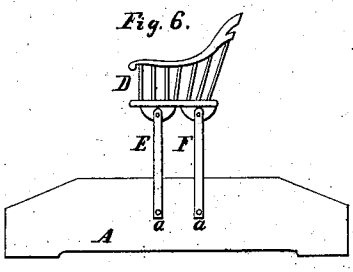


Fig. 6.



Witnesses:

Francis Snyder

David R. Quick

Inventor:

Henry F. Metzler

UNITED STATES PATENT OFFICE.

HENRY F. METZLER, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND THOS. G. COWPERTHWAITE, OF SAME PLACE.

SPRING-HORSE.

Specification of Letters Patent No. 46,529, dated February 21, 1865.

To all whom it may concern:

Be it known that I, HENRY F. METZLER, of the city, county, and State of New York, have invented a new and useful Improvement in Spring-Horses and Baby-Tenders; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which make part of this specification.

The nature of my invention consists of three parts. First—so arranging and combining of the standards relative to the horse baby tender or chair that it or either of them, shall have a horizontal longitudinal declination and a vice versa vibrating or rocking motion. Second—in rearranging or adjusting of the said standards connecting with the base or platform or with the said horse, baby tender or chair or both of them (the base and horse) that the horse, baby tender or chair shall have a vice-versa declination or oscillating motion while moving in a longitudinal direction. Third—the employment of a circle or circles or two half circles (or their equivalents) to which are attached (separately considered) the axles and standards, and on either side of said circles are connected double straps, and a spring or springs all to operate in combination with the said horse, baby tender or chair.

The following is a description of the construction and operation of my invention in which—

Figure 1, is a side and perspective view of my improvement as connected with the horse. Fig. 2, is a side view of my improvement and representing (partly by dotted lines) the horizontal longitudinal declination and vice-versa or rocking motion. Fig. 3, is a side view of my improvement and representing (partly by dotted lines) the vice-versa declination or oscillating motion while moving in a longitudinal direction. Fig. 4, represents a side view of my improvement connected with a crib or baby tender. Fig. 4′, represents a sectional part of figure 4. Fig. 5, represents a top view of the base, ratchet wheels, springs, circles and standards. Fig. 6, represents a chair.

To enable others to make and use my invention I will proceed to describe its construction and manner of using the same reference being had to the several figures in which—

A, represents the base or platform.

B, represents a horse.

C, represents a crib or baby tender.

D represents a chair.

E and F, represents two upright standards, one end of which are connected with the axles *a*, *a*, the other (or upper) ends are jointed to and connected with the horse, baby tender or chair. These standards have connected thereto two half circles G, and with them are connected double straps H, to which straps are attached one end of the springs I. The other end of these springs are connected to the base by means of a ratchet wheel shaft *b*, and cords, *c*.

The weight to be sustained by the horse, baby tender or chair is regulated by giving the spring or springs more or less tension which is done by winding up or unwinding the cord or cords on the shaft, and is held in position by the ratchet wheel and pawl *d*, as shown in Fig. 5.

The different motions referred to in Figs. 2 and 3, are produced by changing the attachment of the standards viz. placing their upper ends farther apart which is done by adjusting the pins *e*, or, placing them closer together will give another motion which is not shown in the drawings.

The object of having double straps is, that each side of the circle shall be sustained or held by each end of the strap that, as the weight or child is carried over on either side of the perpendicular line both springs shall have an equal amount of stress at the same time.

It may be perceived that by using one whole circle and having the straps and springs arranged in the manner described will have the same effect.

The circle J, represented by Fig. 4′, represents one of the two circles which form the bottom part of the crib and bolted together as shown at *g*, Fig. 4, the object of these circles and bolt (or their equivalents) is that the crib or baby tender may be turned around in order to give the crib or baby tender a side motion.

The motion or operation of the horse is kept up by the child quickly touching its feet upon the base at *t*, which together with the stress upon the springs, will carry it over the perpendicular point and land its feet on the opposite end. Thus the operation as described may be kept up.

Having thus described the nature, construction and operation of my improvement I do not wish to confine myself to the precise form of the parts as the same may be changed without deviating from the main feature of my invention.

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

The manner in which the standards are arranged combined operated and adjusted relatively to their several parts and to the horse baby tender or chair whereby the several motions as described are obtained.

HENRY F. METZLER.

Witnesses:
FRANCIS SNYDER,
DAVID R. QUIRK.