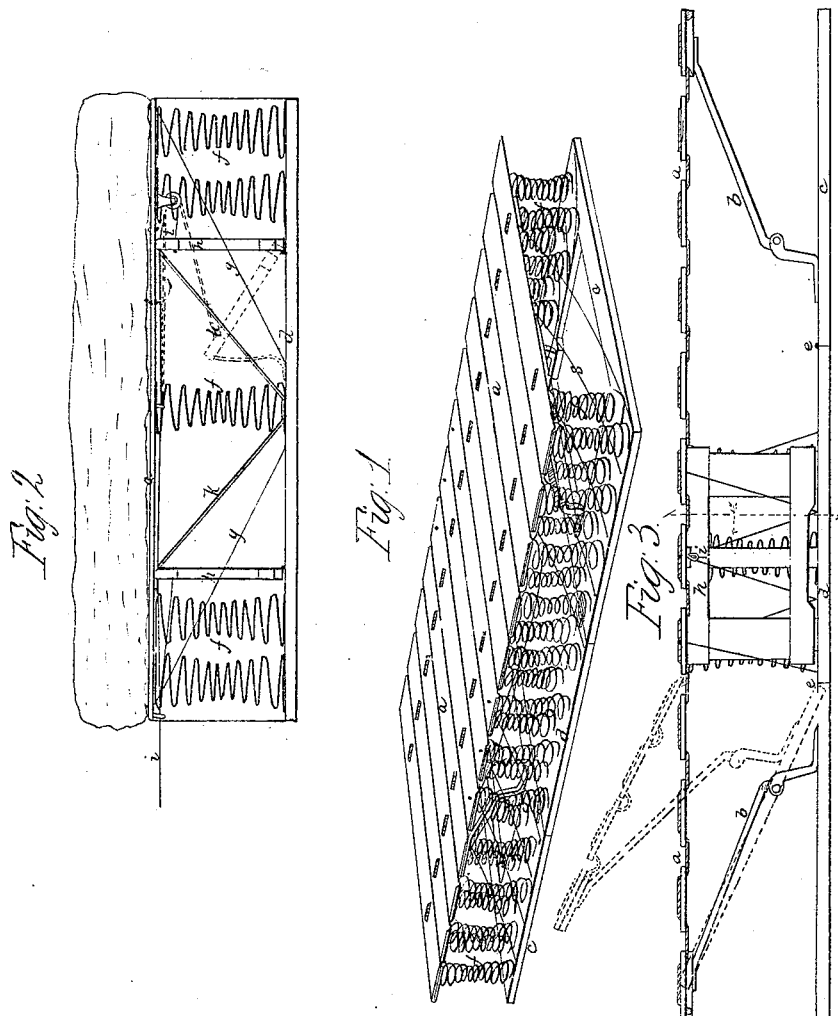


D. Baird,
Bed Bottom,
No. 7,882, Patented Jan. 7, 1851.



UNITED STATES PATENT OFFICE.

DAVID BAIRD, OF NEW YORK, N. Y.

SPRING-MATRESS FOR INVALIDS.

Specification of Letters Patent No. 7,882, dated January 7, 1851; Antedated October 1, 1850.

To all whom it may concern:

Be it known that I, DAVID BAIRD, of New York, in the county of New York and State of New York, have invented certain Improvements in Elevating Spring-Mattresses, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawings, of which—

Figure 1, is a perspective view of the mattress with the case removed, Fig. 2, is a cross section, and Fig. 3, a longitudinal section.

The advantages of elevating spring mattresses to all and more particularly to invalids have been universally acknowledged; but as they have hitherto been constructed they have been imperfect, and subject to give rise to many inconveniences which have much retarded their introduction to common use. Among these objections were the awkward modes of changing the position, the liability to get out of order, the unavoidable entrance of vermin into the interior, and the impossibility of effecting their expulsion when once they had taken possession.

My improvements consist in making the chamber which contains the springs, &c., so that all its parts shall be hermetically sealed against the entrance of vermin, and have none of its interior parts projecting through the case.

I make the upper surface of slats (*a*) of wood, connected together by cords, the end slats of which are fastened to iron stays (*b*) which are firmly attached to the elevating parts (*c*) of the bottom board (*d*) near the hinges (*e*) and have a rule joint which allows of a limited motion. These stays (*b*)

by projecting toward the ends, act as braces and keep the slat cords tightly stretched in all positions, without interfering with the elasticity of the mattress, or the elevating of its ends. Both ends of the mattress are made to elevate, by the end lower boards (*c*) being joined to the middle board (*d*) by hinges (*e*); the joint being kept tight by a strip of leather glued over it, and the whole upper part being inclosed in a case of ticking. The slats are supported by spiral springs (*f*) in the usual manner, and are kept from any lateral motion and from rising too high by the diagonal ends (*g*).

It is sometimes necessary in obstetrical and other surgical cases to have the middle portion of a bed firm and non elastic. This object is accomplished in my mattress by two pieces (*h*) working on hinges on the bottom board (*d*) which can at pleasure be elevated to a perpendicular position, in which position they support the slats in the middle part of the bed and render it firm and steady. They are elevated by the cords (*i*) and are kept down when not in use by the springs (*k*) which are elastic bands of caoutchouc.

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

1. The employment of the end stays (*b*) having rule joints allowing a limited range of motion, and standing in a bracing position, substantially in the manner and for the purposes set forth.

2. I claim the center supports for rendering that part of the mattress permanent when desired.

DAVID BAIRD.

Witnesses:

HENRY D. SHAWT,
JNO. H. HAND.