W. H. CLARK.

SPRING-FLOORS.

No. 194,580. Patented Aug. 28, 1877.

Fig. 1.

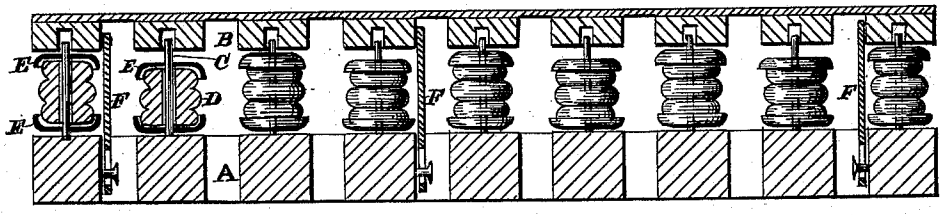
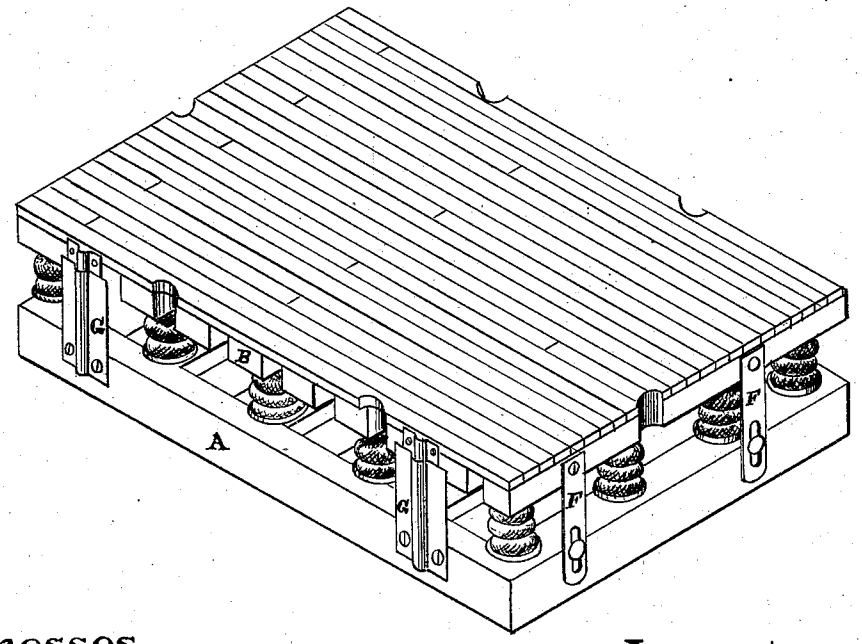


Fig. 2.



Witnesses

Geo. H. Strong.

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UNITED STATES PATENT OFFICE.

WILLIAM H. CLARK, OF AUSTIN, NEVADA.

IMPROVEMENT IN SPRING-FLOORS.

Specification forming part of Letters Patent No. **194,580**, dated August 28, 1877; application filed July 9, 1877.

To all whom it may concern:

Be it known that I, WILLIAM HORNER CLARK, of Austin, county of Lander and State of Nevada, have invented an Improved Spring-Floor; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to a spring-floor which can be formed on a solid foundation in such a manner as not to affect the standing walls of a building; and it consists of a supplemental floor placed over either an ordinary floor or the beams upon which floors are usually secured, having springs beneath the supplemental floor, which are so arranged that an even elasticity will be given to all parts of the floor, all as hereinafter described.

Referring to the accompanying drawings, Figure 1 is a section of my elastic floor. Fig. 2 is a perspective view of the same.

Let A A A represent the joists upon which an ordinary solid floor is made; and B B B are floor joists, upon which the supplemental floor is secured. On the upper side of the joists A, I firmly secure upright pins C C C at desired distances apart. Each of these pins extends up through an elastic buffer, D, and enters a hole in one of the upper floor-joists B, said hole being lined with an anti-friction metal. Upon the bearing-faces of the buffer D, I place a metal cap, E E, to prevent it from being pressed out of shape.

To prevent the floor from rebounding beyond any desired height, I place metal strips F upon one side of the floor-joists B, having a slot in their lower ends, which fit over guide-pins, and are thereby held in place in such a manner as to allow the supplemental floor to be pressed down, but prevent it from passing beyond the usual height.

At the ends and sides of my floor I place guides G G, to keep the floor in its proper position and prevent any side or end movement. These guides may be made in any desired manner; but in the present case I have shown them as being made of two plates, each plate having a longitudinal groove in its center, and one plate being secured to the side or end wall and the other to the supplemental floor in such a manner as to match with each other.

Some of the buffers D are not as high as the others, being made of a smaller size, so that when an extraordinary strain is brought upon the floor the shorter springs will receive the pressure, thereby causing the floor to retain its elasticity equally for a light or heavy weight.

By this construction I am able to form a spring-floor that is safe and durable, and will not affect the standing walls of the building. If desired, this spring-floor may cover only a portion of a room, a stationary platform being built up even with it, so that a level surface will be presented, the stationary portion being used for seats, music-stand, or any desired purpose.

At convenient places I leave openings H for ventilation. When the floor is pressed down it forces the air through these ventilators, and prevents any damage occurring from the air being compressed beneath the floor.

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

1. In combination with the spring-floor supported on the rubber buffers D, the metal caps E E and upright pins C, substantially as and for the purpose described.

2. In constructing a spring-floor, the metal strips F for preventing the floor from rebounding above desired height, and guides G for keeping the floor in its proper position, and also the ventilators H at desired parts of the floor, all arranged and operating substantially as and for the purpose above described.

In witness whereof I have hereunto set my hand and seal.

WILLIAM HORNER CLARK. [L. S.]

Witnesses:

WILLIAM GIBSON,

ALFRED E. SHANNON.