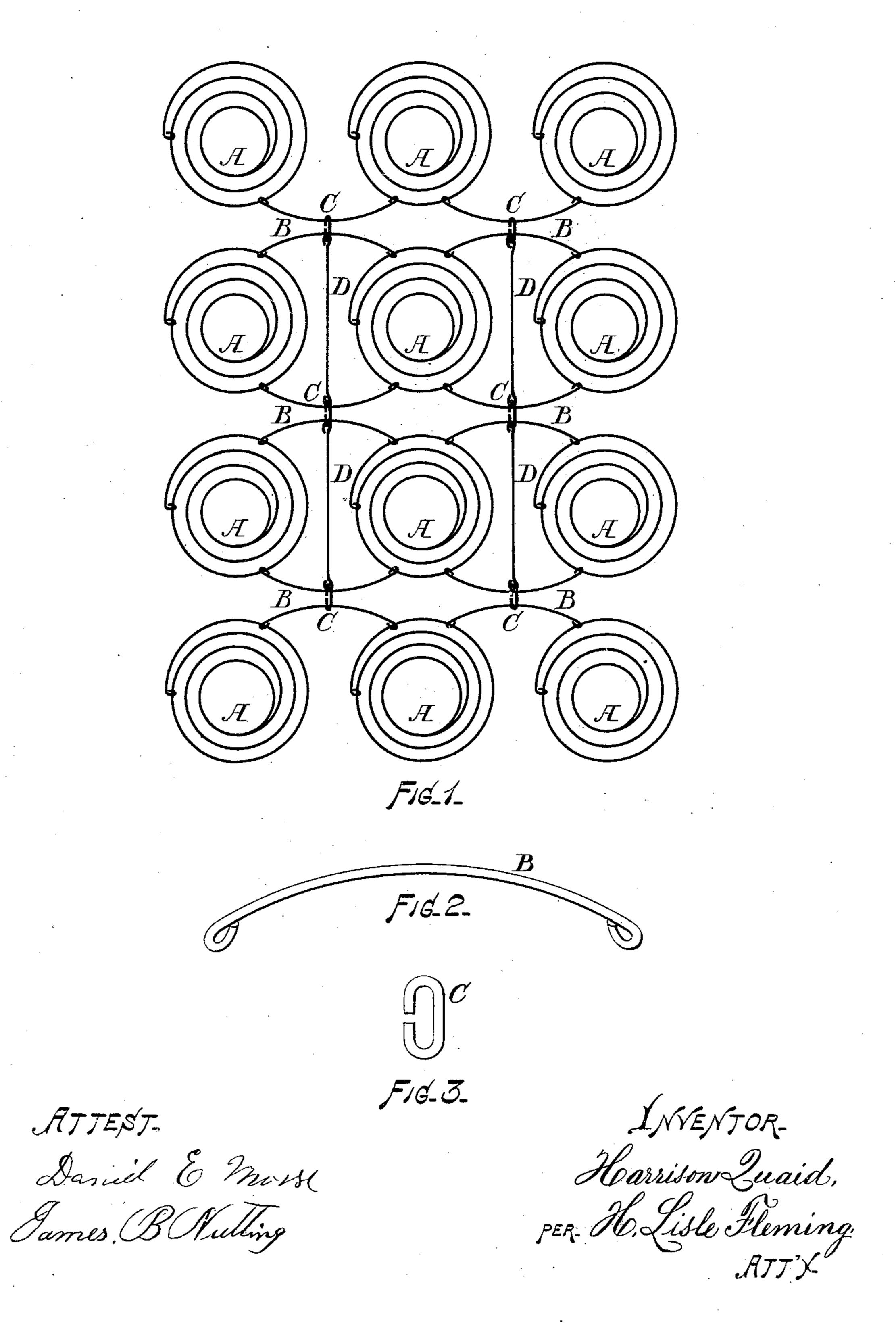
(No Model.)

## H. QUAID.

## SPRING BED BOTTOM.

No. 332,750.

Patented Dec. 22, 1885.



## United States Patent Office.

HARRISON QUAID, OF SCHENECTADY, NEW YORK, ASSIGNOR OF TWO-THIRDS TO HENRY A. BURT, JR., AND WILLIAM Y. THOMSON, BOTH OF SAME PLACE.

## SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 332,750, dated December 22, 1885.

Application filed May 28, 1884. Serial No. 133, 129. (No model.)

To all whom it may concern:

Be it known that I, HARRISON QUAID, of the city and county of Schenectady, and State of New York, have invented a new and useful Improvement in Spring Bed-Bottoms, of which

the following is a specification.

This invention relates to that class of spring-beds composed of wire coils; and it consists in devices for connecting and securing said coils, all as hereinafter more fully described, my object being to connect the coils diagonally as well as longitudinally and transversely and to so form the connections that when one portion of the bed-bottom, composed of any number or series of coils, is depressed the other portions or series will not be affected thereby, thus practically making each and every part adjustable one with the other, and also to simplify, cheapen, and otherwise perfect the construction of spring-beds.

In the accompanying drawings, Figure 1 is a general view showing a section of bed-bottom having the coils connected in accordance with my improved method, and Figs. 2 and 3 are detail views, on a larger scale, showing, respectively, the semi-elliptic link and the loop, which constitute the main features of

my invention.

Similar letters of reference in each indicate

30 corresponding parts.

By A are represented the usual coiled-wire springs, by B the semi-elliptic links, and by C the loops, said links being arranged in couplets each hooked into two coils having an open hook formed at each end for that purpose, each set or pair of links being centrally connected or coupled together by a loop, thus establishing a complete connection between four distinct coils, each of which are in like manner connected by means of similar links and loops with additional coils in either direction until a sufficient number of coils have been joined together to form a spring bed-bottom of the required dimensions.

D represents an auxiliary link, that may be hooked into and extend between loops longitudinally, so that, if desired, a more positive connection may be effected between aforesaid sets of links in that direction. The same re-

sults may also be accomplished with chains, 50

cords, straps, or elastic bands.

The advantages derived from this construction are as follows: The adjustability of parts, owing to the form of connections above described, the open hooks in links sliding along 55 that portion of coils to which they are attached, and the links themselves in the loops, so that when the coils forming one portion of the bedbottom are depressed the adjacent coils are relieved from strain and remain upright. This 60 is particularly desirable when persons of unequal weight occupy the bed at the same time, as each side of the spring bed-bottom will then accommodate itself to the varied pressure, so that neither individual will inconvenience the 65 other, as liable with spring-beds of different construction, in consequence of the inclination of springs toward the heavier person; also, the coils may be more economically packed and transported by not being connected until re- 7c quired for use, when the different parts may be readily and expeditiously assembled and placed in position. In so doing the coils are first attached to the slats, the links are inserted through loops and hooked into coils, as 75 aforesaid, when the device is rendered completely operative as a spring bed-bottom.

I am aware that springs in bed-bottoms have heretofore been connected by links, and that these said links have also been connected by 80 loops, the construction and operation of such devices, however, differing from my invention, insomuch that the links have angular instead of elliptical formation, the effect of which has been to retain the loops at or near the center 85 of each couplet, so that neither link could move independently of the other, and consequently that when either link was subjected to tension each coil connected by that particular couplet of links and the restraining-loop aforesaid would 90 be disturbed with the objectionable result above specified, whereas the curved or partially-elliptic links employed by me are adapted to slide separately through the loops, so that each link may follow the depression of 95 the coils to which it may be individually attached without affecting the neighboring link of the couplet, so as to disturb materially the

adjacent coils, the beneficial result of this improved construction being, as aforesaid, a greater elasticity and more perfect adjustability of the parts in relation to each other, so as to admit of persons of unequal weight occupying the same bed without inconvenience. Therefore although I do not claim, broadly, the connection of coiled-wire springs by links and loops—

To What I do claim, and desire to secure by

Letters Patent, is—

1. In combination with the coiled wire springs A, the semi-elliptic links B and loops C, as and for the purpose specified.

2. In combination with the coiled - wire

springs A, the semi-elliptic links B, and loops C, the auxiliary links D, connecting said loops, as and for the purpose specified.

3. In spring bed-bottoms, the combination of the coiled-wire springs A, semi-elliptic links 20 B, connecting said springs, loops C, connecting said links, and the auxiliary links D, connected with the loops, all constructed and arranged substantially as shown and described, for the objects herein set forth.

HARRISON QUAID.

Witnesses:

H. LISLE FLEMING, WILLIAM Y. THOMSON.