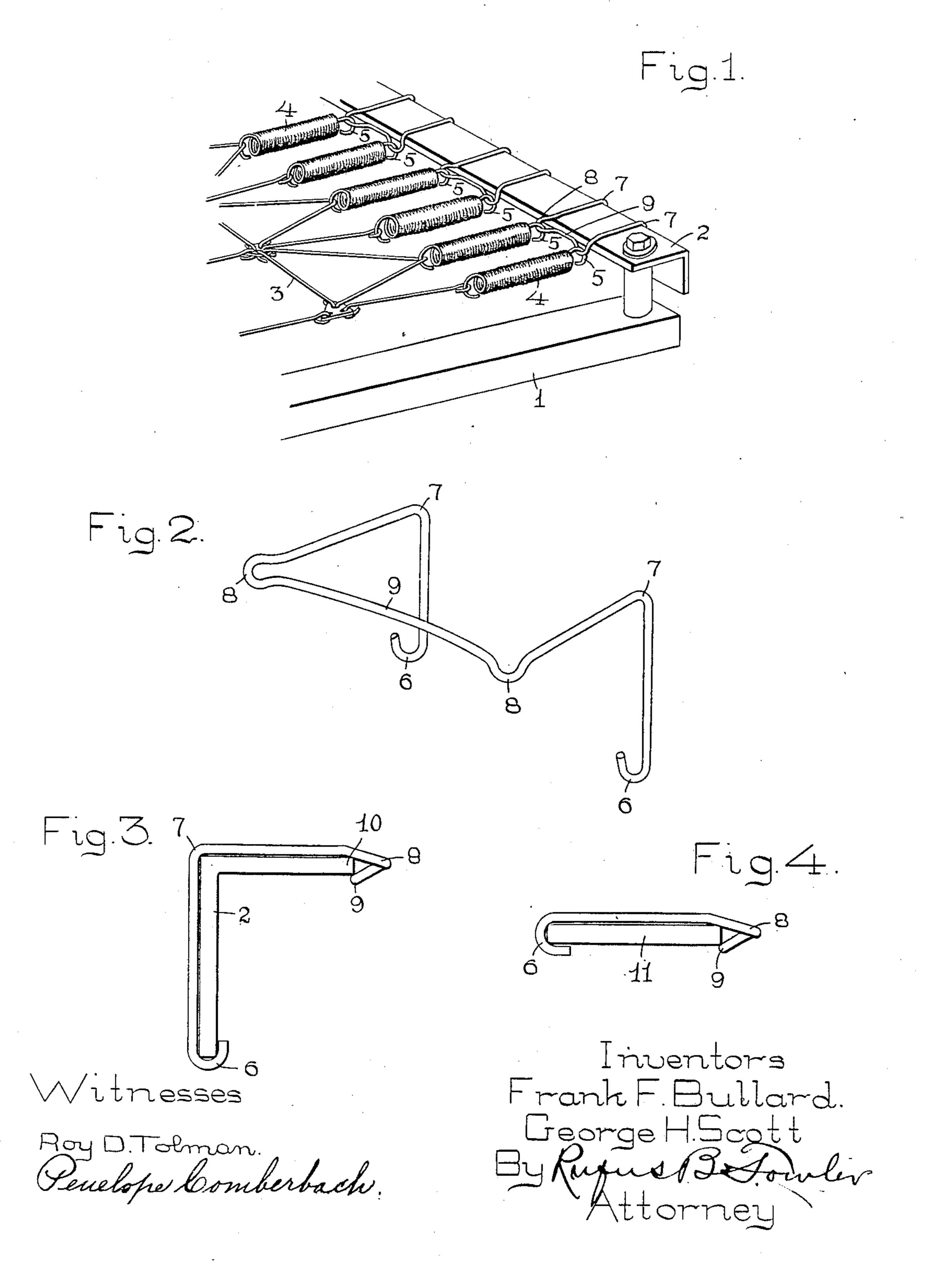
F. F. BULLARD & G. H. SCOTT. DETACHABLE HOOK FOR SPRING BEDS. APPLICATION FILED APR. 24, 1905.



UNITED STATES PATENT OFFICE.

FRANK F. BULLARD AND GEORGE H. SCOTT, OF WORCESTER, MASSACHUSETTS, ASSIGNORS TO MORGAN SPRING COMPANY, OF WORCESTER, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

DETACHABLE HOOK FOR SPRING-BEDS.

No. 825,702.

Specification of Letters Patent.

Patented July 10, 1906.

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To all whom it may concern:

Be it known that we, Frank F. Bullard and George H. Scott, citizens of the United States, residing at Worcester, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in a Detachable Hook for Spring-Beds, of which the following is a specification accompanied by drawings forming a part of the same, in which—

Figure 1 represents a perspective view of a portion of a spring-bed, showing the application of our detachable hook thereto. Fig. 2 is a perspective view of our improved detachable hook. Fig. 3 is an end view of a crossrail of a spring-bed, showing one of our detachable hooks applied to the rail. Fig. 4 is an end view of a cross-rail having a hook ap-

plied of a modified form.

Similar reference figures refer to similar

parts in the different views.

The object of our present invention is to provide a detachable hook capable of being applied to the end or cross rails of a spring25 bed for the purpose of supporting the wire bed-bottom, and thereby obviating the necessity of forming a series of holes in the end rails; and our invention consists in forming a doubled-wire hook adapted to engage one edge of the rail and hold the hook in place.

Referring to the accompanying drawings, 1 denotes one of the side rails of a spring-bed, 2 one of the end rails, and 3 a portion of the wire bed-bottom upon which the mattress is supported, said bed-bottom being attached to the end rail 2. The elasticity of the bed-bottom is increased by attaching it to a series of helical springs 4, which are in turn at-

tached to the end rail 2.

It is the common practice in the construction of spring-beds of this class to attach the helical springs to the end rails by forming hooks 5 on the helical springs, which enter holes bored or punched in the edge of the end rail 2. This method of construction involves the expense of boring or punching a large number of holes through the edge of the end rail, and as the end rail is of considerable thickness difficulty is experienced in hooking and unhooking the helical springs. When holes are formed in the edge of the end rail to receive the hooked ends of the helical springs, the number and position of the helical springs

becomes predetermined, and it is sometimes desirable to vary the number of helical 55 springs employed and also to change their

position.

By the use of our improved detachable hook we are able to vary the number of helical springs, to change their position, and also to 60 avoid the expense of punching or drilling a large number of holes in the end rails. The detachable hook embodying our invention is shown in perspective view and detached from the end rail in Fig. 2, and it is formed 65 from a single piece of elastic steel wire having hooks 6 6 formed on the ends of the wire, which is bent at right angles at 7 and again bent in a semicircular loop at 88, with the intervening section 9 between the loops 8 8 70 slightly curved and adapted to spring under the edge 10 of the right-angled end rail 2. When the hook is applied to the end rail, the hooked ends 6 6 engage one edge of the rightangled rail and the elastic curved section 9 is 75 sprung under the opposite edge of the rail to hold the hook in place and apply a slight pulling strain upon the hooked ends 6, so that the hook will be frictionally held from sliding along the end rail. The semicircular loops 80 8 8 provide a space to receive the hooked ends 5 of the helical springs 4, as shown in perspective view in Fig. 1. The right-angled bends in the wire at 7 adapt the hook to fit the two sides of the right-angled rails 2; 85 but in case the end rail consists of a flat strip of steel, as shown at 11, Fig. 4, then the right-angled bends 7 may be omitted and the wire be left straight between the semicircular loops 8 and the hooked ends 6. By varying 90 the length of the curved elastic section 9 the distance between the semicircular loops 8 can be varied to suit the number and position of the helical springs, and the position of the detachable hooks upon the end rails of the 95 bed may also be varied as desired.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a detachable hook for spring-beds, formed from a sin- 100 gle piece of wire, having at each end a hook bent downwardly to engage the outside of the end rail of a bed, the wires from said hooks passing over the top of the rail and being bent downwardly and upwardly forming 105 semicircular loops fitting the inside edge of

section.

said rail, said loops providing opportunity for the attachment of the bed-bottom, with the wire between said loops curved slightly upward to engage the lower side of said rail.

2. In a spring-bed comprising end rails for the support of a bed-bottom, the combination with the end rail, of a detachable hook formed from a single piece of wire having hooks at its ends to engage one edge of said end rail, and having an elastic central section adapted to engage the lower side of the opposite edge of said rail and with downwardly-extending loops at the ends of said elastic

3. As an article of manufacture, a detachable hook for spring-beds made from a single

piece of wire provided with hooks at each end bent downward and upwardly to form semicircular loops 8, 8, in a plane below the plane of the wire between said hooks and said semicircular loops 8, 8, and having an intervening upwardly - curved section 9 above the plane of said semicircular loops and below the plane of the wire between said hooks and said semicircular loops 8, 8.

Dated this 21st day of April, 1905.

FRANK F. BULLARD. GEO. H. SCOTT.

Witnesses:

Rufus B. Fowler, Penelope Comberbach.