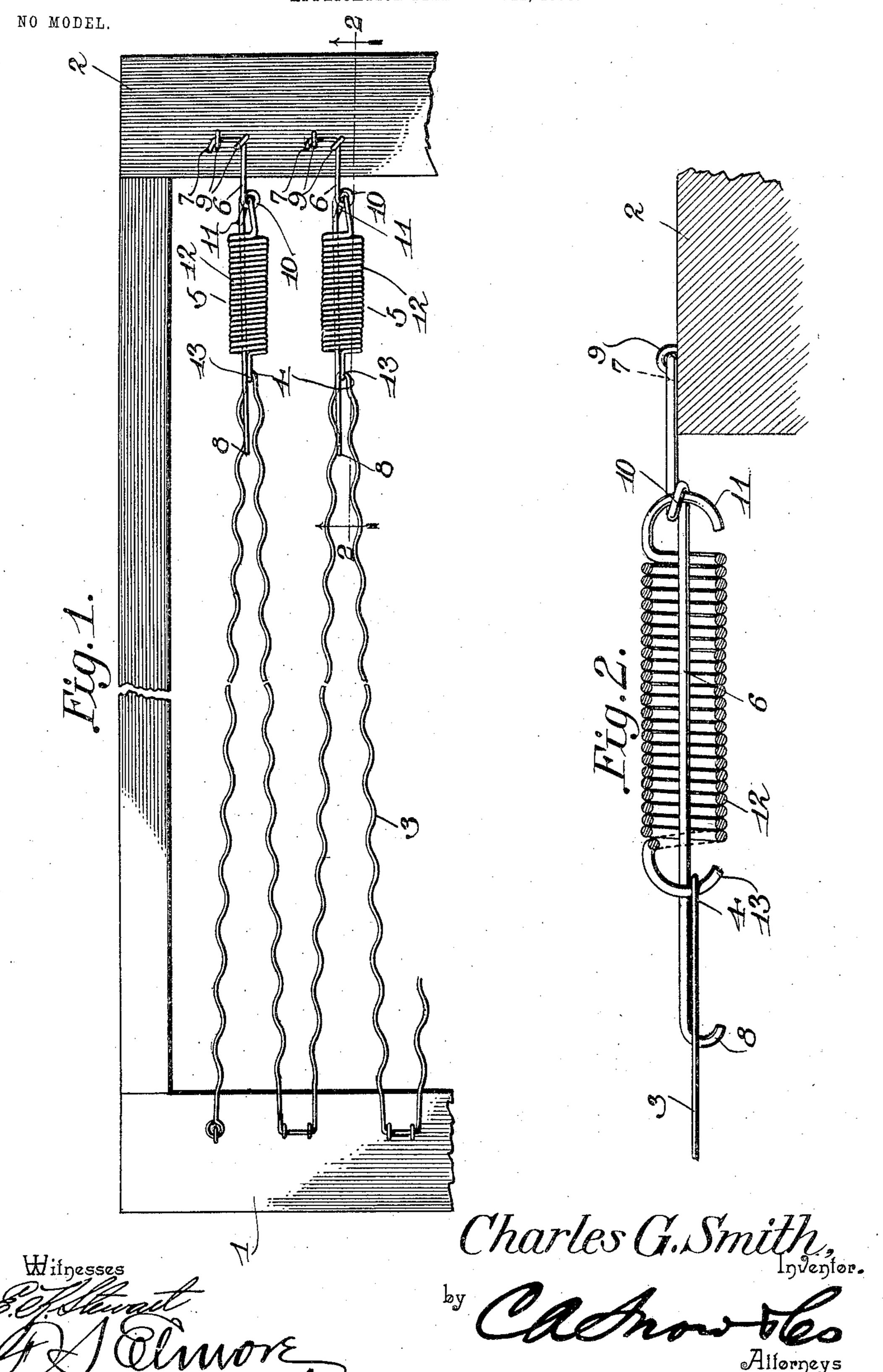
C. G. SMITH.
SPRING MATTRESS.
APPLICATION FILED DEC. 21, 1903.



United States Patent Office.

CHARLES G. SMITH, OF LAKELAND, MICHIGAN.

SPRING-MATTRESS.

SPECIFICATION forming part of Letters Patent No. 769,843, dated September 13, 1904.

Application filed December 21, 1903. Serial No. 186,103. (No model.)

To all whom it may concern:

Be it known that I, Charles G. Smith, a citizen of the United States, residing at Lakeland, in the county of Livingston and State of Michigan, have invented a new and useful Spring-Mattress, of which the following is a specification.

My invention relates to spring-mattresses, and has for its objects to produce a simple inexpensive device forming a connection between one end of the mattress and mattressframe and designed to regulate the tension of the mattress to permit the latter to yield bodily longitudinally under the influence of undue strain, thereby materially prolonging the life of the mattress, and one in which bodily yielding of the mattress will be limited or prevented beyond a certain degree or extent.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of a mattress embodying my invention. Fig. 2 is a central longitudinal section on the line 2 2 of Fig. 1, showing the parts on an enlarged scale.

Referring to the drawings, 1 and 2 designate, respectively, the end bars of the mattressframe, which may be of the usual or any preferred construction and material, while 3 is the mattress, which may be of any ordinary construction, but preferably consists of a continuous sinuous or other spring wire folded back and forth upon itself longitudinally and stapled or otherwise fixed at the terminal of each longitudinal course to the end bar 1, but terminating at the other end short of the bar 2 in a series of loops 4, engaged each with one of my improved tension devices 5.

Inasmuch as the tension devices 5, constituting the subject of my invention, are identical in construction and operation, I will describe but one in detail, in which 6 indicates the primary engaging member, preferably formed from a suitable length of wire bent to produce at one end a horizontally-disposed hook-like head 7 and at its other or outer end with a vertically-disposed downwardly-extending hook-engaging portion 8, constituting a stop, said member 6 being pivotally

connected with the bar 2, preferably by staples or analogous attaching devices 9, engaged around the head 7. The member is also provided adjacent to its inner end with a horizontally-disposed laterally-extending eye 10, 55 engaged by a hook 11, formed upon one end of the secondary or tension member 12 of the device.

The member 12 is in the form of a coil-spring of suitable tension, having formed or 60 otherwise provided upon its outer end a vertically-disposed hook or engaging member 13, with which the loop 4 of the mattress-wire is engaged. It is here to be particularly noted that the outer end of engaging member 6, 65 which latter overlies and rests upon the wire of loop 4, is extended a suitable distance beyond the end of spring 12 and has its hook or engaging portion 8 disposed within the path of loop 4, in which position it will constantly remain by gravity, owing to the pivotal connection of the member 6 with the bar 2.

In practice undue pressure upon the mattress 3 expands the springs 12 and permits the mattress to yield bodily longitudinally to 75 a certain predetermined extent or degree determined by the remoteness of hook or stop 8 from the end of spring 12, it being understood, of course, that when the springs have expanded sufficiently the loops 4 will come 80 into engagement with the hooks or stops 8 and be thereby held against further bodily movement and that the member 6 may be bent to produce the stop 8 at any desired point, and thus control the degree to which 85 the mattress yields bodily.

From the foregoing it will be seen that I produce a simple inexpensive device which is admirably adapted for the attainment of the ends in view. It is to be understood, however, that I do not limit myself to the precise details herein set forth, as minor changes may be made without departing from the spirit of the invention.

Having thus described my invention, what 95 I claim is—

1. In a device of the class described, the combination with a frame-bar, of an engaging member pivotally connected therewith, a tension-spring attached to the member, said 100

member being extended through the spring and provided beyond and at a point remote from the outer end of the latter with a stop, and a mattress connected with the spring in the path and in advance of the stop and adapted for direct engagement with the latter to limit expansion of the spring.

2. In a device of the class described, the combination with a frame-bar, of an engaging member pivotally connected therewith and provided with an eye, a tension-spring having a portion engaging the eye for attach-

ment to the member, said member being extended through the spring and provided beyond the outer end of the latter with a stop, 15 and a mattress connected with the spring in advance and in the path of the stop.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

CHARLES G. SMITH.

Witnesses:

J. H. Jochum, Jr.,

J. Ross Colhoun.