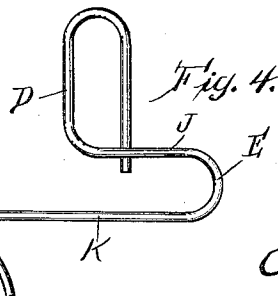
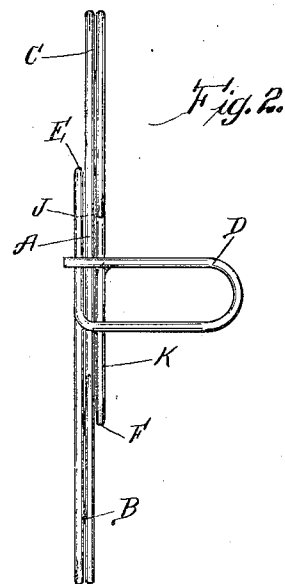
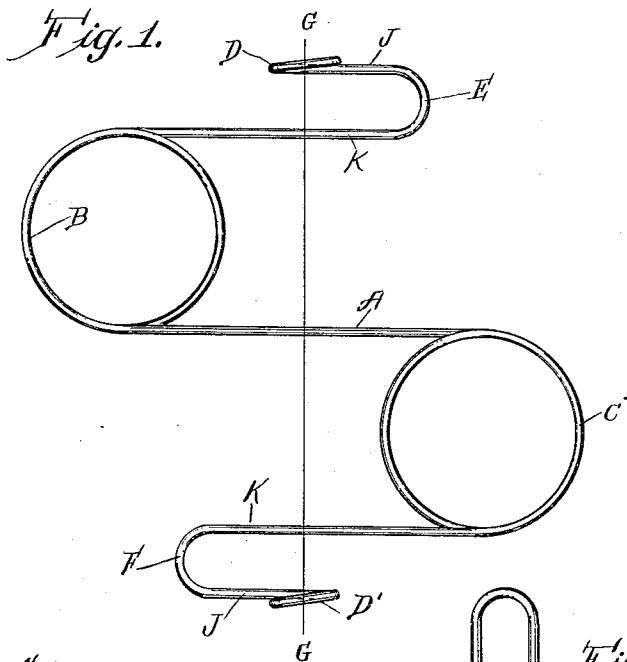
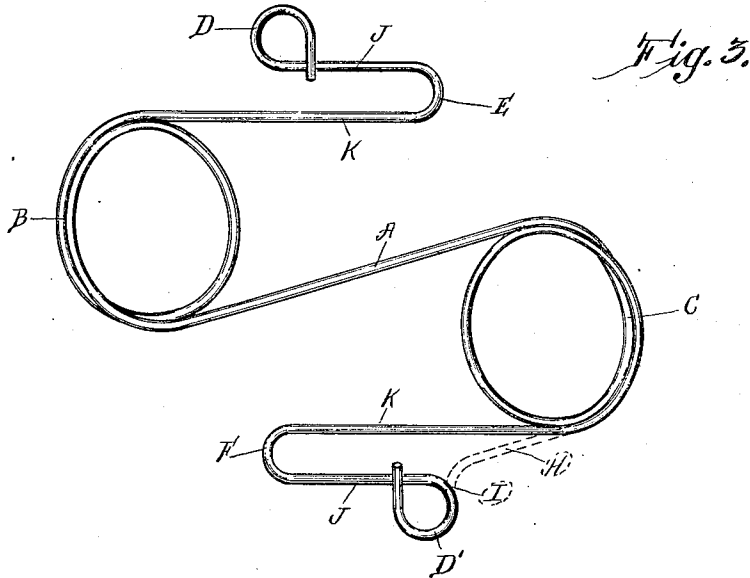


A. SCHEIBLE.
 SPRING.
 APPLICATION FILED JUNE 14, 1912.

1,055,662.

Patented Mar. 11, 1913.



Witnesses:
Arthur Thayer

Elsie Robloff

Inventor:

Albert Scheible

UNITED STATES PATENT OFFICE.

ALBERT SCHEIBLE, OF CHICAGO, ILLINOIS.

SPRING.

1,055,662.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed June 14, 1912. Serial No. 703,661.

To all whom it may concern:

Be it known that I, ALBERT SCHEIBLE, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Spring, of which the following is a clear, concise, and full specification, reference being had to the accompanying drawings, forming part of this application.

My invention relates to springs, being particularly applicable to compression springs as used on spring beds. Its object is to provide an easily made spring which will permit of being greatly compressed without putting a severe torsional strain on the material of which it is made, and which will be more resilient than the spirally coiled springs in common use. I attain these objects by the construction shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the preferred form of my invention. Fig. 2 is a top view of the same. Fig. 3 is a perspective of an alternative form having the fastening wings or terminal loops in the same planes with the return bends. Fig. 4 shows another shape of terminal wing.

Referring to the drawings, the spring of my invention is made with a central portion A connecting coils B and C which are coiled in opposite directions and which preferably lie in parallel planes. At each end of the spring I provide an attaching loop or wing, preferably in the form of an elongated loop. If the spring is to be interposed between parallel surfaces, as between a slat and a bed-bottom, the terminal wings D and D' lie in horizontal planes substantially parallel to the central portion A and substantially at right angles to the planes of the vertical coils B and C. However, if the ends of the spring are to be fastened to members in a common plane, the wings are turned in substantially the same plane with the coils B and C, as in Figs. 3 and 4. In either case, I interpose a U-shaped portion or return bend between the coil and the wing adjacent to it, as shown at E and F.

The attaching wings D and D' preferably have their centers on a line G G passing through the middle of the central part A at right angles to the latter, so that these wings will move to and fro along this line when the spring is compressed or distended. In using such a spring, the terminal loops

or wings are usually clamped firmly to the members between which the spring is inserted, whereby the portions J of the loops are held rigidly. If the coil C were connected to the loop D' by a straight leg, as shown in dotted lines at H, movement of the spring would produce a severe strain at the juncture I of the leg H and the terminal loop D'. I have found that when such a direct connection is made from the coil of a spring to its terminal fastening, the power required to flex or twist the juncture of the spring with the terminal interferes greatly with the resiliency of the spring. However, if a return bend is introduced between the coil and the terminal, this bend will open or close more or less when the spring is compressed or distended, thereby enabling me to utilize the full resiliency of each coil.

While I preferably make my spring with the central portion A parallel to the legs J K of the return bends at each end, I do not wish to be limited to this parallel position of the members when the spring is distended, since the central member may be at an angle to the legs of the return bends, as in Fig. 3. Neither do I wish to be limited to the exact shape or arrangement of the terminals or attaching wings used with the spring of my invention, as numerous modifications may be made in the same without departing from the spirit of my invention.

What I claim as new and desire to cover by Letters Patent is:

1. A spring composed of a single strand of wire having a substantially horizontal and substantially straight central portion, each end of the central portion being developed into a vertical coil; and an attaching wing at each end of the spring; there being a return bend interposed between each attaching wing and the adjacent vertical coil.

2. A spring composed of a single strand of wire terminating in upper and lower attaching wings, including a pair of vertical coils joined by a substantially straight central portion; and U-shaped portions intermediate of the coils and the attaching wings, the legs of the U-shaped portions being substantially horizontal.

3. A spring composed of a single strand of wire terminating in upper and lower attaching wings, including a pair of coils in substantially parallel vertical planes joined by a central leg, there being U-shaped por-

tions intermediate of the coils and the adjacent attaching wings.

4. A spring composed of a single strand of wire terminating in upper and lower attaching wings, including a pair of coils in substantially parallel vertical planes; there
5 being a return bend interposed between each

attaching wing and the adjacent vertical coil, the return bends being in substantially vertical planes.

ALBERT SCHEIBLE.

Witnesses:

M. A. SMITH, Jr.,
ELSIE ROBOFF.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
