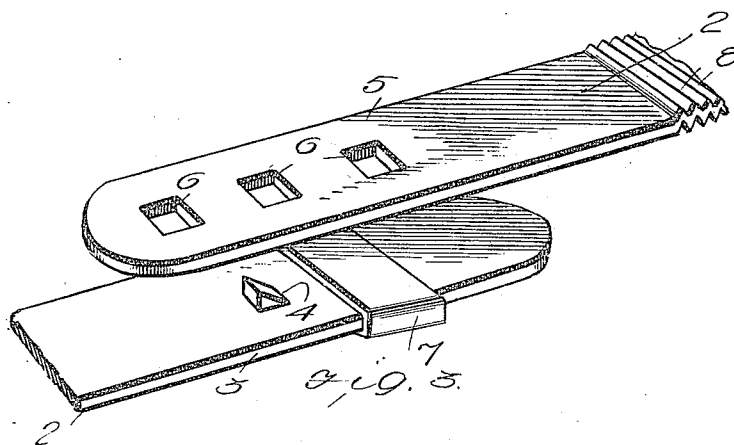
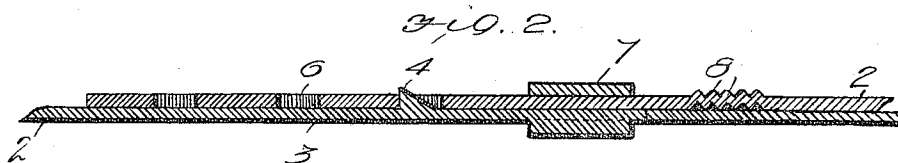
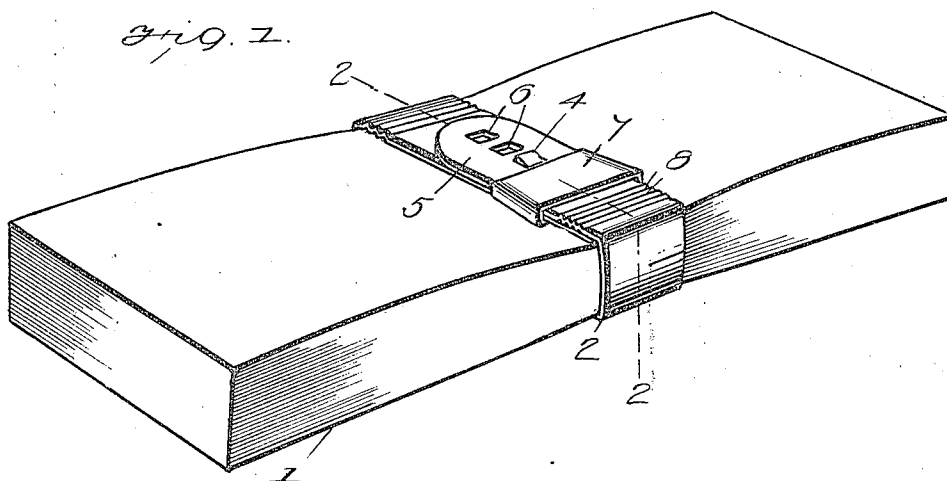


W. R. SPRINGER.  
 SPRING STEEL BAND.  
 APPLICATION FILED MAY 1, 1918.

1,278,779.

Patented Sept. 10, 1918.



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# UNITED STATES PATENT OFFICE.

WILSON ROY SPRINGER, OF OSKALOOSA, IOWA.

## SPRING-STEEL BAND.

1,278,779.

Specification of Letters Patent. Patented Sept. 10, 1918.

Application filed May 1, 1918. Serial No. 231,867.

### *To all whom it may concern:*

Be it known that I, WILSON ROY SPRINGER, a citizen of the United States, and a resident of Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Spring-Steel Bands, of which the following is a specification.

My invention is an improvement in spring steel bands, and has for its object to provide a band of the character specified adapted for tying up mail matter, as for instance, packages of letters and the like, wherein the band may be used many times, the band having interengaging means at its ends for permitting it to be attached about the package, the attaching means being adjustable for various size packages.

### *In the drawings:*

Figure 1 is a perspective view of the improved band in use;

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the interengaging ends of the bands detached.

The present embodiment of the invention is shown in connection with a package of letters or the like, the band being arranged about the center of the package in the same manner as the string commonly used.

The improved band 2 is of spring steel or other resilient metal, of suitable length and width. One end 3 of the band is provided with a loop 7 fastened to the band at a convenient distance from the end of the band 2 to provide a sliding surface for the end 5 to work on while being adjusted, and at a convenient distance in front of the loop 7 a lug 4 on the outer face of the band, the said lug being substantially triangular in vertical cross section as shown.

This lug 4 which is a catch has that face remote from the loop 7 perpendicular to the face of the band, while the other face is inclined to allow the opposite end 5 of the band, when passed through the loop 7, to be easily engaged with the lug 4 at any one of the openings 6.

The opposite end 5 of the band has a series 6 of openings, the said openings being rectangular in the present instance, and having

one axis transverse to the band. These openings are spaced apart at suitable intervals, and they are adapted to engage the lug 4 and to receive the said lug 4 so that the end 5 of the band will lie smoothly upon the end 3 of the band when the lug 4 and one of the openings 6 are engaged.

The loop 7 has that side adjacent to the end of the band 2 of greater width, thus allowing more space when the end 5 is to be passed through the loop 7 and eliminating any possibility of the end 5 becoming caught in being passed through the loop 7.

In placing the band, it is placed around the package in the usual manner and the end 5 of the band is passed through the loop 7 and engaged with the lug 4 at one of the openings 6.

It will be noticed in Fig. 2 that the apex of the lug 4 being higher above the plane of the band 2 than the loop 7 enough tension will be caused to throw the end 5 of the band flat on the end 3 when the lug 4 and one of the openings 6 are engaged.

It will be noticed by referring to Figs. 1 and 2 that at points in the length of the band there are crimps 8, and the said crimps are designed to increase the flexibility of the band and to facilitate tightening the band around the package of letters or the like.

In practice, the band may be of different widths and thickness suitable for the purpose, and it is obvious that they are practically everlasting. There are no projections to snag or mutilate associated bundles and packages, and the band lies flat on the package. It is impossible for the band to become loosened in transit, and it is easily adjusted and released, and is inexpensive, and in all making a practical tying device for mail and like service.

The improved band can be sealed to insure delivery so that a letter once taken out of the package cannot be put back without breaking the seal.

I do not claim spring steel bands, ties or buckles as of my invention, as these are not patentable; neither do I claim a tie or buckle constructed with a tongue or lug, as

shown in the patent granted to Herbert S. Pullman, April 26, 1887, No. 362,040.

I claim:

A device of the character specified comprising a resilient metal band having at one  
5 end a loop and a lug, the other end of the band being adapted to pass through the loop

and having a series of spaced openings for receiving the lug, said loop being of greatest width at the end remote from the lug and 10 the lug having that face adjacent to the loop inclined.

WILSON ROY SPRINGER.

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