No. 742,892. PATENTED NOV. 3, 1903.

G. W. McGILL.

SPRING CLIP.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.

Fig. 1.

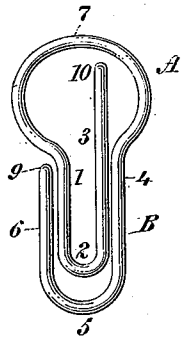


Fig. 2.

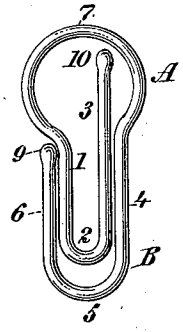


Fig. 3.

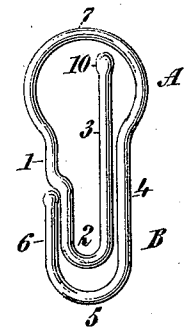


Fig. 6.

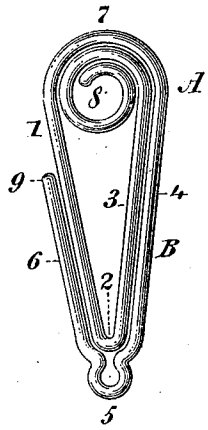


Fig. 4.

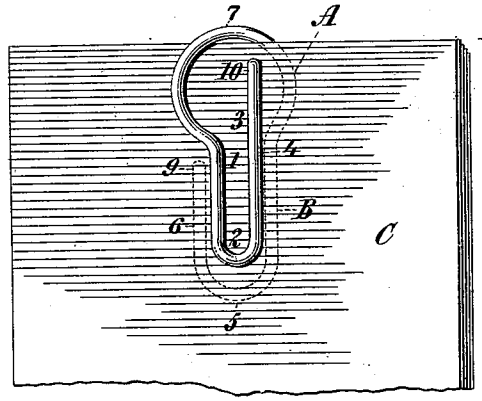


Fig. 7.

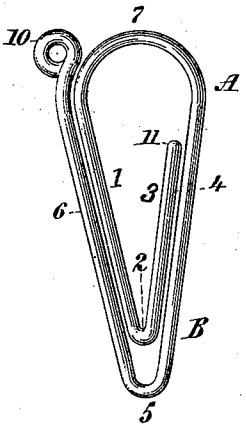
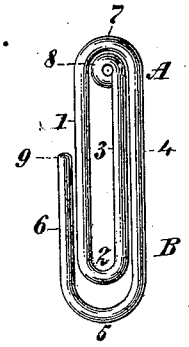


Fig. 5.



WITNESSES:

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No. 742,892. Patented November 3, 1903.

UNITED STATES PATENT OFFICE.

GEORGE W. McGILL, OF RIVERDALE-ON-HUDSON, NEW YORK.

SPRING-CLIP.

SPECIFICATION forming part of Letters Patent No. 742,892, dated November 3, 1903.

Application filed June 1, 1903. Serial No. 159,599. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. McGILL, a citizen of the United States, and a resident of Riverdale-on-Hudson, in the county of New York and State of New York, have invented certain new and useful Improvements in Spring-Clips, of which the following is a specification.

My invention has for its object to provide a novel, simple, and effective spring-clip fashioned from a single piece of wire of suitable size and temper and which is susceptible of being rapidly and economically made, readily applied in securing together papers and like articles, and which will be free from all tendency to abrade or tear the papers or other material held by it.

In the accompanying drawings, making part of this specification, and wherein similar reference characters indicate corresponding parts, Figure 1 represents a side view of the device. Fig. 2 represents a similar view, differing only in the construction-wire, being shown therein provided with bulbous-shaped terminals. Fig. 3 is a view similar to Fig. 2 and showing an additional bend in one side of the clip-frame. Fig. 4 shows the clip fashioned as shown in Fig. 1 and applied in holding several sheets of paper; and Figs. 5, 6, and 7 are similar side views of the device, showing three different modifications in its construction.

In forming the clip the wire composing it is bent from about its center, as at 7, providing the upper part A of its frame, with the rest of the wire folded downward therefrom in manner to provide the two depending arms 1 4, the arm 1 being folded around at 2 in manner to provide the inner base-wire of the frame and the member 3, the latter being projected upwardly along the inner side of the arm 4 and the arm 4 being folded around and below such inner base-wire 2 in manner to provide the frame its outer and lower base-wire 5 and the member 6, the latter being projected upward along the outer side of the arm 1, such opposite folding of the lower portions of the arms providing the lower part B of the clip. In the fold forming the upper portion A of the clip-frame the wire is single, while in the fold forming its lower portion B it is doubled. The terminal of the longer upwardly-projecting member of the clip is set immediately below or in line with the top of the clip, and the terminal of its shorter member is set about midway the length of the clip. The upper portion of the clip and the upwardly-projecting free end of its longer member set thereat are of a size and placement to admit of their being readily and simultaneously clasped between the thumb and forefinger of the user of the clip without the upwardly-projecting terminal of the short member of the clip being thereby engaged or interfered with.

In the first four figures of the drawings the wire composing the clip is shown folded in manner to provide it a frame or body part of loop formation, the upper portion A of such frame having an open-ring form and its lower portion B an oblong form, the portion A being relatively wide and shallow and the portion B being relatively narrow and long, with the wire in the lower opposite sides of the part A merging into the depending arms 1 4, the latter being folded in opposite directions beneath the part A, one around the other, and in manner to provide the frame its lower oblong part B—that is to say, the arms 1 4 at some distance below the part A are folded in opposite directions in manner to provide the frame its respective inner and outer base-wires 2 and 5 and the arms their respective upwardly-projecting members 3 and 6, the inner one of which, being the longest, as represented in these figures, has its free end projected up in manner to vertically cross the area of the upper part A, with its terminal 10 set below the inner top of such part A, while the corresponding shorter and outer member 6 is projected up along the outer side of the arm 1, with its terminal 9 set below the outer lower side of the part A. The fold of the wire providing the frame its outer base-wire 5 is some distance below the fold providing it its inner base-wire 2, while the wires forming the depending arm 1 and its upwardly-projecting member 3 and the dependent arm 4 and its upwardly-projecting member 6, respectively, rest normally in lateral parallel relation, the arm 1 in close parallel relation with the member 6 and the arm 4 in close parallel relation with the member 3 and all in the same plane.

The clip is applied to the uses intended by simultaneously clasping between the thumb and forefinger its upper part A and that part of the free end of the member 3 vertically crossing the inner area of such part A and pressing the edges of the papers being clipped against the lower base-wire 5 in manner to cause the latter, with the lower part of the arm 4 and member 6, to diverge from the plane occupied by the inner base-wire 2, whereupon the clip may readily be pressed down to its final position upon the papers, with the wire in its top diagonally spanning the edges of the latter and its arms 1 4 and their respective folds and parts clamping the papers from opposite sides, as is shown in Fig. 4.

Providing the clip-frame with an upper part of a size adapting it to be clasped between the thumb and forefinger, with the terminal of the longer of the upwardly-projecting members of its arms extended into the area of such upper part or adjacent to it in manner to admit of its being simultaneously clasped therewith and having the upwardly-projecting member of the other arm of a shorter length to bring its terminal below such upper part and where it may not unintentionally engage the thumb and forefinger when clasping the latter forms a salient feature of this improvement. The greater width or spread of the upper part of the clip in these figures as compared with its lower part admits of the device being applied in clipping a considerable volume or thickness of papers, while the narrower spread of its lower part tends to conserve the resilience of the wire therein by lessening the spread of that part of it producing the inner and outer base folds of the clip.

In the alternative construction illustrated in Fig. 5 the frame of the device is shown wider in its base part B than in its upper part A and having the top of its member 3 terminating in a volute 8 within the area of such top part and closely adjacent to the upper fold of the wire of the frame. In the alternative construction illustrated in Fig. 6 the frame is shown having a triangular configuration, the wider part of the frame being its top or upper part A and the vertex of its angle being its lower part B, the outer base-wire 5 being folded into a ring formation beneath the pointed fold of the inner base-wire 2.

In the alternative construction shown in Fig. 7 the frame is also triangular in configuration, and the outer member 6 of the device is shown carried up to the outer top of the clip and terminating there in a volute 10, the latter being set outside the frame-top above the shoulder of the member 1, while the inner arm 3 is shown terminating at 11 or below that part of the upper part A of the frame adapted to be clasped by the finger and thumb of the user.

The construction of the device in any of the forms shown in the drawings will produce the results herein described as desirable; but preference is given the construction shown in Figs. 1 to 4, inclusive, as the simplest and most satisfactory embodiment of the invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A spring-clip composed of a single wire of suitable size and temper folded from its center in manner to provide it two arms differing in length and folded in manner to provide the device a frame or body part having the wire single in its upper portion and double in its lower portion, the two wire arms forming the lower portion of the frame being folded, one arm around the other in manner to provide the frame a base part composed of two wires set one at some considerable distance below the other, and having the free ends of the wire projecting upwardly from such base, with the terminal of one end set adjacent to the top of the frame and the terminal of the other end set near the center of the frame, with all parts of the wire occupying the same plane.

2. A spring-clip composed of a single piece of suitable wire folded in manner to provide it a frame or body part having its upper portion of a size adapting it to be clasped between the thumb and forefinger of the user with the terminal of one end of the wire set adjacent to the top of the frame in manner to admit of its being simultaneously clasped with such upper portion, and having the terminal of the other end of the wire set at a sufficient distance below such upper portion to avoid being so clasped.

3. A spring-clip composed of a single piece of suitable wire folded in manner to provide it a frame or body part having its upper portion of a size adapting it to be clasped between the thumb and forefinger of the user, with the terminal of one end of the wire set adjacent to the top of the frame in manner to admit of its being simultaneously clasped with such upper portion, and having the terminal of the other end of the wire set at a sufficient distance below such upper portion to avoid being so clasped therewith and to admit of its being freely vibrated transversely through the plane of such clasped portion of the clip.

4. A spring-clip composed of a single piece of suitable wire folded in manner to provide it a frame or body part having its upper portion wider than its lower portion and of a size adapting it to be clasped between the thumb and forefinger of the user, with the terminal of one end of the wire set adjacent to the top of the frame in manner to admit of its being simultaneously clasped with such upper portion, and having the terminal of the other end of the wire set at a sufficient distance below such upper portion to avoid being so clasped.

5. A spring-clip composed of a single wire of suitable size and temper folded in manner to provide it a frame or body part having a

relatively wide and shallow looped upper part in which the wire is single, and a relatively long and narrow looped lower part in which the wire is doubled and folded one wire around the other and in the same plane, the free end of the inner fold of the wire being extended vertically up across the inner area of the wide upper portion of the frame with the terminal of the outer fold set below the same.

6. A spring-clip composed of a single piece of suitable wire folded in manner to provide it a frame or body part having its upper portion of a size adapting it to be clasped between the thumb and forefinger, with the terminal of one end of the wire extended across the area of such upper portion in manner to admit of its being simultaneously clasped with such upper portion, and having the terminal of its other end set at a sufficient distance below such upper portion to avoid being so clasped.

7. A spring-clip composed of a single wire of suitable size and temper folded in manner to provide it a frame or body part having the wire single in its upper part and doubled in its lower part, the upper part of the frame being of a size adapting it to be clasped between the finger and thumb of the user, with the terminal of one end of the wire vertically extended across the area of such upper portion in manner to admit of its being simultaneously clasped with such upper portion, and having the terminal of the other end of the wire set at a sufficient distance below such upper portion to avoid being so clasped with it; and having the fold of the wire forming the outer base-wire of the clip set some distance below the fold forming its inner base-wire in manner to admit the former being freely vibrated transversely through the plane occupied by the latter, and normally by both.

Signed at Riverdale-on-Hudson, in the county of New York and State of New York, this 28th day of May, A. D. 1902.

GEORGE W. McGILL.

Witnesses:
GUSTAVE DIETERICH,
HENRY KASEFANG.