No. 735,566. PATENTED AUG. 4, 1903.

G. W. McGILL.

WIRE CLIP.

APPLICATION FILED JAN. 23, 1903.

NO MODEL.

Fig. 1.



Fig. 4.

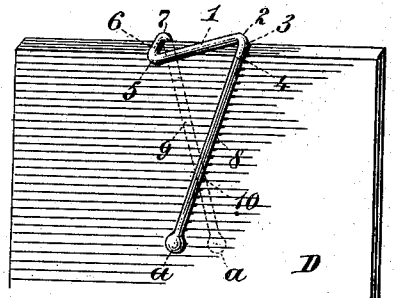


Fig. 8.

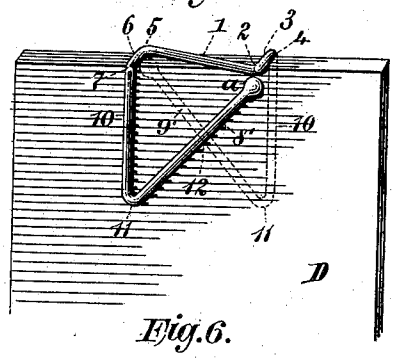


Fig. 2.

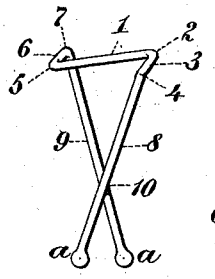


Fig. 6.

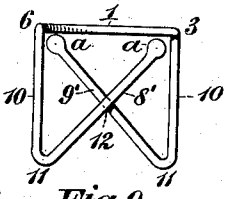


Fig. 7.

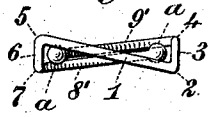


Fig. 9.

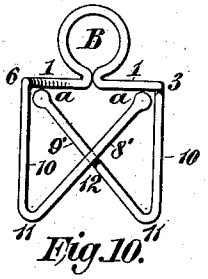


Fig. 3.



Fig. 11.

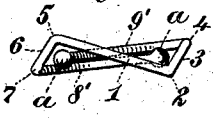


Fig. 5.

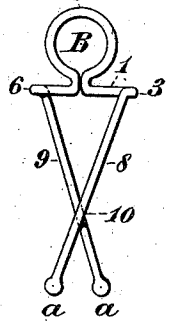
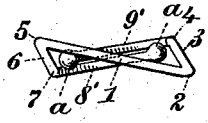


Fig. 10.

Fig. 12.



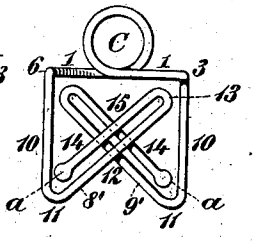
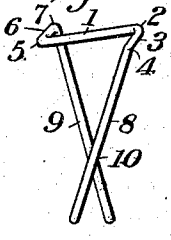


Fig. 13.



WITNESSES:

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Edwin N. Dieterich.

INVENTOR

George W. McGill

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 735,566. Patented August 4, 1903.

UNITED STATES PATENT OFFICE.

GEORGE W. McGILL, OF RIVERDALE, NEW YORK.

WIRE CLIP.

SPECIFICATION forming part of Letters Patent No. 735,566, dated August 4, 1903.

Application filed January 23, 1903. Serial No. 140,322. (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, in the county of New York and State of New York, have invented certain new and useful Improvements in Wire Clips, of which the following is a specification.

My invention has for its object to provide a novel, simple, and effective spring-clip made of a single piece of suitable spring-wire and which is susceptible of being rapidly and economically manufactured, which may be readily applied in securing together papers and similar articles, and which will be free from all tendency to abrade, deface, or tear the papers or other articles to which it may be applied or to work loose or displace itself from its correct position thereon while in use.

In the accompanying drawings, making part of this specification, and in which similar reference letters and numerals indicate corresponding parts, Figure 1 represents a longitudinal side view of a wire blank from which the clip is fashioned. Fig. 2 is a side elevation in perspective of one configuration of the clip. Fig. 3 is a top view of Fig. 2. Fig. 4 is a view similar to Fig 2 and in which the clip is shown applied in securing together several sheets of paper. Fig. 5 is a side elevation of the device, not in perspective, showing its top part provided with a ring for suspending it from a nail or like article. Fig. 6 shows a side elevation of the device of modified configuration. Fig. 7 is a top view of Fig. 6. Fig. 8 is a view in perspective similar to Fig. 6, showing the device so formed applied as intended in securing together several sheets of paper. Fig. 9 is a view similar to Fig. 6 and showing the device so fashioned provided with a ring for suspending it similar in construction and position to the ring shown in Fig. 5. Fig. 10 is a side elevation of the device, showing a still further modification in its configuration and in the manner in which its suspending-ring is provided. Figs. 11 and 12 respectively show modifications in the formation of the top or crown of the clip. Fig. 13 is a view similar to Fig. 2, showing the clip fashioned from a wire blank unprovided with bulbous terminals.

The wire blank A from which the device is fashioned is provided with globular or bulbous shaped terminals *a a*, and in forming the clip, as shown in all the figures, this blank is first bent or folded in manner to provide a center part 1, forming the diagonal top or head bar of the clip, with the wire on each side of such center part or head projecting in opposite directions from the points 2 and 5, respectively, and in the same plane with the center part 1. These oppositely-projecting parts of the wires are respectively now bent down from the points 4 and 7 in the same direction and at angles with the part 1, forming the right-angular shoulders 3 and 6 of the clip and, as in Figs. 2 to 5, inclusive, the arms 8 and 9 thereof, which arms converge toward and across each other at 10, such bending of the wire blank producing a spring-clip having a crown or head of an N-shaped formation, with arms projecting downwardly therefrom and crossing each other below such N-shaped head and bearing one upon the other in spring contact between such head and their bulbous terminals *a a*. The clip so fashioned is applied in securing together papers, &c., as intended by inserting the latter between its bulbous terminals *a a* and pressing its arms down upon them until its N-shaped crown or top rides or rests upon the clipped edge of such papers, with its head-bar 1 crossing the same diagonally, its shoulders 3 6 crossing it transversely, and with its arms 8 9 pressing toward each other from opposite sides of such papers, clamping and securing the papers between them, as is shown in Fig. 4 of the drawings.

In the modified configuration of the device shown in Figs. 6 to 9, inclusive, the wires projecting from the shoulders 3 and 6 are bent down into the vertically-set arms 10 10, which are bent inward toward each other at 11 11, forming the supplementary arms 8′ and 9′, which cross and bear against each other at 12, with their bulbous terminals *a a* resting below the shoulders 3 6.

In the modified construction shown in Fig. 10 the supplementary arms 8′ and 9′ are extended and are again bent at 13 back upon themselves to provide the parallel arms 14 14, providing the device the four points of spring contact and bearing, (shown at 12 15,) with their bulbous terminals *a a* resting in the inner angle formed by the folds 11 11 of the arms.

The rings B (shown in Figs. 5 and 9, re-

spectively) are provided by bending upwardly into ring form part of the wire connecting the shoulders 3 6 and forming the head-bar 1, and the alternative ring formation C (shown in Fig. 10) is provided by an upward central coiling of part of the wire forming such head-bar 1. These rings permit of the device, with the articles secured therein, being suspended from a nail or such like article.

In Fig. 11 the shoulders 3 6, respectively, are shown set at obtuse angles with the diagonally-placed head-bar 1, and in the other figures of the drawings the shoulders are shown set at acute angles of varying degree with said bar. This mode of setting the shoulders reduces the width of the top or head of the clip without limiting thereby the bulk of the articles that may be inserted in the clip.

The N-shaped formation of the top of the clip enables it to receive and bind a considerable volume of papers or other like material and prevent all unintentional lateral movement of the clip on the papers while in use by the lateral slipping of the head-bar of its top from its position in diagonally crossing and riding the clipped edges of the papers, and the globular or bulbous formation of the terminals of the resilient arms of the clip facilitates the ready insertion between such arms of the papers, &c., being clipped without abrading or defacing the surfaces of such papers, and they further serve as an auxiliary point of bearing upon the respective sides of the clipped papers, as is fully shown in Fig. 4 of the drawings, although a clip of less efficiency may be made from a wire blank unprovided with such bulbous terminals, as is shown in Fig. 13 of the drawings.

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

1. A spring-wire clip fashioned from a single piece of suitable wire having its center folded into an N-shaped configuration, providing the clip a top having two relatively short shoulders connected by a relatively long head-bar extending diagonally from opposite ends of such shoulders.

2. A spring-wire clip fashioned from a single piece of suitable wire having its center folded into an N-shaped configuration, providing the clip a crown having a relatively long head-bar set diagonally between two relatively short shoulders and connecting them from their opposite ends, with the wire forming said shoulders continued down at right angles from the same and converging beneath such crown in manner to cross each other in resilient bearing, one against the other.

3. A spring-wire clip fashioned from a single piece of suitable wire having its center folded into an N-shaped formation, providing the clip a top or crown having a relatively long diagonally-set head-bar connecting integrally with two relatively short shoulders at one of the opposite ends of each, such head-bar being provided with means of suspending the clip from a nail, rod or other like article.

4. In a spring-wire clip a top or crown consisting of a relatively long head-bar integrally connecting with two relatively short end parts forming shoulders set in the same plane with said head-bar and at opposite angles therewith.

5. As a new article of manufacture, a spring-wire clip, fashioned from a single wire blank having its center part folded in manner to provide the clip a top part or crown consisting of a horizontal bar provided with two horizontally-set angular ends merging into two depending converging arms which cross each other in spring-bearing below the crown and in planes at right angles with the plane occupied by the crown.

Signed at Riverdale, in the county of New York and State of New York, this 15th day of August, A. D. 1902.

GEORGE W. McGILL.

Witnesses:
W. HARRY McGILL,
MARY L. H. McGILL.