

(No Model.)

G. T. JOHNSON.
CLIP FOR TOILET PAPER PACKAGES.

No. 570,667.

Patented Nov. 3, 1896.

Fig 1

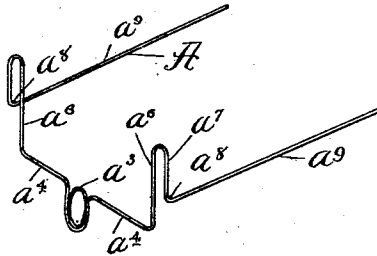


Fig 2

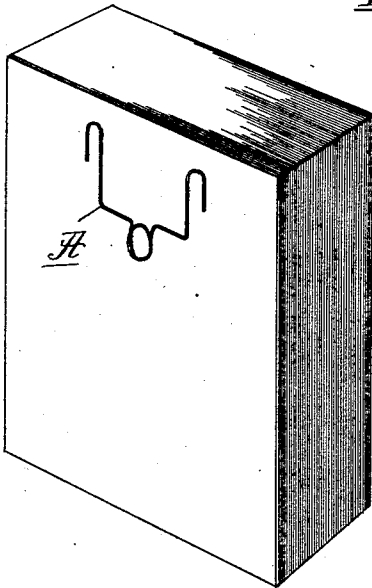


Fig 3

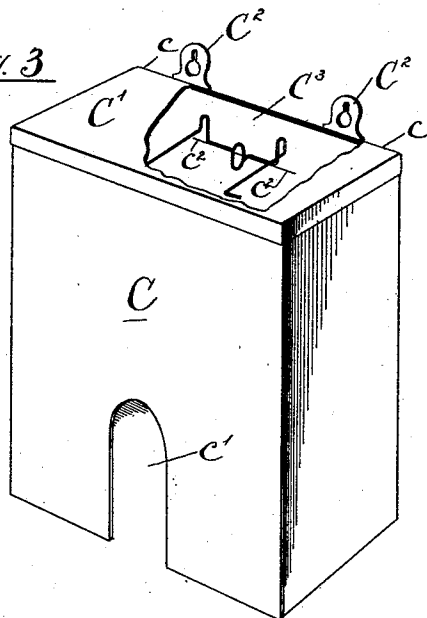


Fig 4

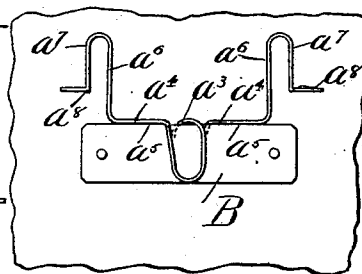


Fig 5

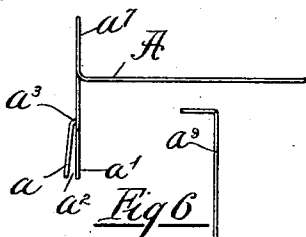


Fig 6

Witnesses

L. Clinton Hamlin
Albert H. Emery

Inventor

George T. Johnson

by Dayton, Pool & Brown
his Attorneys

UNITED STATES PATENT OFFICE

GEORGE T. JOHNSON, OF CHICAGO, ILLINOIS.

CLIP FOR TOILET-PAPER PACKAGES.

SPECIFICATION forming part of Letters Patent No. 570,667, dated November 3, 1896.

Application filed March 19, 1896. Serial No. 583,958. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. JOHNSON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Clips for Toilet-Paper Packages; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of
10 this specification.

This invention relates to improvements in clips for suspending toilet-paper packages, and refers more particularly to a wire clip
15 adapted for use with that class of packages wherein each package is composed of a plurality of loose sheets which are held together and suspended from a suitable support by means of a clip, the clip being provided with
20 one or more arms which are passed transversely through the package and from which the sheets may be stripped as needed.

Various kinds of clips have heretofore been used for this purpose, among which may be
25 mentioned one formed of a strip of tin or other sheet metal passed through the package near one end thereof, so as to stand in a vertical plane when the package is suspended, the sheet-metal strip being provided at its
30 back end with a hook adapted for engagement with an aperture or slot formed in some suitable support, so as to hold the strip in horizontal position at right angles to its support. The outer end of the strip is bent over
35 for the purpose of preventing the sheets from slipping off the same. Inasmuch as the strip is arranged in a vertical plane with one of its side edges uppermost it is obviously necessary to bend the end of the strip over laterally one
40 way or the other. Clips of this kind have been found objectionable in various respects.

A principal objection is that owing to the soft flexible character of the paper used the single strip or arm employed is not sufficient
45 to hold the sheets of the package from twisting or pivoting around on the clip, and said sheets are therefore permitted to get out of register with each other and the package as a whole to become distorted. Clips of this
50 construction are only intended for use with special holders, and upon attempting to use a package thus distorted in any of the hold-

ers now commonly employed trouble is experienced both in placing the package in position therein and in afterward withdrawing the
55 sheets. This is especially true when used in any of the improved holders now commonly in use wherein a mechanical device is employed for feeding out the sheets.

Another objection is that, owing to the fact 60 that the outer end of the strip is simply bent over laterally, the elastic character of the package as a whole forces the outermost sheets outwardly against the bent end, and a slight lateral bodily movement of the said 65 outermost sheet or sheets permits it or them to slip off over the end. Obviously, when one or more sheets have thus escaped, the whole package becomes loosened and the escape of succeeding sheets is thereby facilitated. To obviate this difficulty, it has heretofore been necessary to wrap or band each individual package at the factory before it is shipped to the consumer, thus adding a material item to its cost. 75

Still another objection is the relatively great cost of the clips when made of sheet metal, it being obvious that the strips must be cut from sheets, and owing to the irregular form of the arm and hook at the back this 80 entails more or less waste of material. Inasmuch as each clip is designed for use but a single time or with but one package only this item is one of importance.

Another form of clip commonly in use consists of a sheet-metal back plate to which is attached a wire arm which extends through the package and is bent over at its outer end in substantially the same manner as described in connection with the sheet-metal clip. 90 While such a clip requires somewhat less sheet metal, yet it has most of the objections above referred to, and in addition has the objection of being a composite device, and therefore more labor is involved in its construction. 95

Still another form of clip consists simply of a piece of wire extended through the package, its back end portion being bent at right angles and provided with a ring or loop 100 whereby it may be hung on a nail and its front end similarly bent at right angles to hold the sheets thereon. This clip, while extremely simple and cheap, obviously entirely

fails to hold the sheets in register, and is for this and other reasons not adapted for use with most of the special holders, and also has the same objection of permitting the sheets to escape unless otherwise secured together both at the front and rear.

It is the object of the present invention, therefore, not only to overcome the above-noted objections but to provide a clip of improved construction capable of use in connection with any of the holders now commonly employed and at same time well adapted for use without a holder, thus especially fitting it for general household use in places where the extra cost of holders would prevent the adoption of toilet-paper packages.

The invention consists in the matters hereinafter described, and more particularly pointed out in the appended claims, and the same will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a clip embodying one form of my invention. Fig. 2 is a perspective view of a toilet-paper package with the clip applied thereto. Fig. 3 is a perspective view of a simple form of case, showing the clip in position therein, the sheets having been removed. Fig. 4 is a face view of a fragment of a wall, showing one simple means of supporting a clip thereon. Figs. 5 and 6 are side elevation and top plan view, respectively, of the clip.

Referring to said drawings, A designates as a whole a clip embodying a preferred form of my invention. As shown in said figures, the middle portion of the wire, which is preferably spring-wire, is formed into one complete turn or coil and about three-fourths of a second turn or coil, so as to form two loops or turns $a^1 a^1$, preferably elongated somewhat and arranged in approximately parallel planes or with their sides adjacent to each other, as clearly indicated in the several figures of the drawings. The two coils are, however, not exactly parallel, but are arranged to diverge from each other slightly from top to bottom, so as to provide a narrow V-shaped space a^2 (see Fig. 5) between them, adapted to receive the edge of a piece of pasteboard, sheet metal, or the like, that portion a^3 of the wire which unites the two loops at their upper sides forming a stop which limits the extent of insertion of the edge of the piece of pasteboard or other object, as shown most clearly in Fig. 4. From the upper ends of said loops the portions $a^4 a^4$ of the wire adjacent to the loops are extended horizontally outward in opposite directions some distance in alinement with each other and in the same plane with the V-shaped space a^2 , thereby forming shoulders which are adapted to rest upon the upper edge of the object, upon which the loops are placed straddlewise, as indicated clearly at $a^5 a^5$ in said Fig. 4. The object of this construction is to afford such lateral support for the clip as will prevent it from oscillatory movement when

its loops are engaged with the support, thereby preventing any tendency of the clip to become loosened by the repeated pulls thereon incident to the stripping of the sheets from the clip. The portions $a^6 a^6$ beyond the said horizontal portions a^4 are bent and extended upwardly in the same plane, preferably, and, as shown, at right angles to the said horizontal parts $a^4 a^4$, thus partially inclosing or outlining a plane surface between the two arms. The ends of the wire $a^7 a^7$ are next bent downwardly in the form of return-bends, also arranged in the same plane with the plane of the vertical arms $a^6 a^6$ and extended downwardly a short distance, and then bent at a^8 at right angles to the plane of the back-support thus formed to form arms $a^9 a^9$, which extend outward parallel with each other. This completes the clip as it is formed ready to be inserted through suitable apertures in the package.

Each clip is intended for use but a single time, or until the sheets of paper contained thereon are consumed, and the packages are therefore usually provided with the clips at the factory where they are manufactured. The clip having been formed as shown in Fig. 1, a package of sheets of the required thickness, provided with suitable apertures extending transversely therethrough near one of its ends, is placed upon the arms $a^9 a^9$ of the clip and pushed back into close contact with the back-support of the clip, as indicated clearly in Fig. 2. The outer ends of the arms are next bent at right angles in opposite directions, either outwardly, as shown in Fig. 6, or toward each other, as found desirable or most convenient, thus positively securing the sheets in position upon the clip and preventing the possibility of any twisting of the sheets upon each other which would tend to throw them out of register or permit the package to become distorted. Inasmuch as the sheets are thus secured both in register with each other and from escaping over the ends of the arms it will be entirely unnecessary to place a separate band or wrapper upon each package, as has heretofore commonly been the practice, thus leaving the package open so that its quality can be thoroughly inspected.

The package thus prepared is ready for use and may be conveniently used by simply engaging the loops of the clip with any suitable support, such, for instance, as a strip of sheet metal B, Fig. 4, suitably tacked against the wall. If desired, however, a suitable holder may be provided, such, for instance, as that shown in Fig. 3. In said figure, C designates as a whole a pasteboard box of rectangular form provided with an overlapping top C', hinged at its rear edge, as at c, and provided at its back with suitable tags C² C² or other means whereby it may be suspended against the side of a wall. The lower end of the box is left open. An opening c' will be provided in the front of the box through which the fin-

ger may conveniently be inserted and the sheets withdrawn downward endwise from the box by frictional contact of the finger with the outermost sheet. In its back side C³, near the upper part thereof, the case may be conveniently provided with a horizontal slit c², with the lower edge of which the clip will be engaged, as indicated clearly in said Fig. 3. If preferred, however, a strip similar to the strip B may be applied to the inner back wall of the case.

A clip constructed in accordance with my invention possesses important features of advantage. It is extremely simple and cheap to manufacture and may be attached to the package with the utmost facility. Not only is the package firmly bound and held by the clip alone, as hereinbefore described, but, owing to the resiliency of the wire-engaging loops, the latter have a strong frictional engagement or clamping action when placed upon the support, thus avoiding liability of the clip becoming unhooked or displaced. The construction whereby oscillatory movement of the clip is prevented is also of importance, inasmuch as it insures that the package shall always be retained in perpendicular position, and in this connection it may be noted that if the edge of the support upon which the clip is mounted be other than horizontal the form of the divergent arms may be correspondingly shaped to engage the same to prevent oscillatory movement of the clip in an obvious manner.

While I have herein shown a preferred form of the clip, yet it will be obvious that the exact conformation of the clip is immaterial, especially as regards the contour of the back-support, it being obvious that this may be varied considerably without in any way changing its functions and without involving more than ordinary mechanical skill. I do not, therefore, wish to be limited to the precise construction shown, except as made the subject of specific claims.

I claim as my invention—

1. A suspension-clip for toilet-paper packages, comprising a wire bent to outline or partially outline a plane so as to form a back-support against which the back of the package may rest, an engaging device formed on said back-support, and the terminal end portions of the wire bent to form two parallel arms arranged to project at right angles from the back-support, said arms being located at points vertically between the upper and lower boundaries of the plane outlined or partially outlined by the said back-support.

2. A suspension-clip for toilet-paper packages, composed of a single piece of wire having its middle portion formed into two concentric and opposed loops, the parts of the wire adjacent to said loops carried outwardly in opposite or divergent relation, and in approximately the same plane with the loops,

and bent so as to partially outline a plane surface, and the free end portions extended outward at right angles to the plane thus partially outlined.

3. A suspension-clip for toilet-paper packages, composed of a single piece of wire having its middle portion formed into two opposed loops adapted to receive between them and embrace the edge of a sheet of pasteboard or the like, the ends of the wire being extended outwardly oppositely in horizontal alinement with each other, then deflected upwardly in the same plane with each other, and with the opening between said loops, then formed into a return-bend also in the same plane, and finally bent outwardly at right angles and extended parallel with each other in the same direction.

4. The combination with a toilet-paper package, composed of a plurality of superposed sheets, of a wire suspension-clip composed of a single piece of wire having its middle portion formed into two opposed loops adapted to receive between them and embrace the edge of a sheet of pasteboard or the like, the ends of the wire being extended outwardly oppositely in horizontal alinement with each other, then deflected upwardly in the same plane with each other and with the opening between said loops, then formed into a return-bend also in the same plane, and finally bent outwardly at right angles and extended parallel with each other and in the same direction through the package and the extreme ends bent in opposite directions.

5. The combination with a toilet-paper holder provided on one of its vertical walls with a clip-support comprising a relatively thin supporting edge with which the clip is adapted to be engaged, of a suspension-clip for toilet-paper packages formed of a single piece of wire having its middle portion formed into two opposed loops, the parts of the wire adjacent to said loops carried outwardly in opposite or divergent relation and in approximately the same plane with the loops so as to partially outline a plane surface, and the free end portions extended outward at right angles to the plane thus partially outlined.

6. A suspension-clip for toilet-paper packages composed of a single piece of wire having a plurality of loops formed between its ends adapted for engagement with a suitable support, a back-support, and two parallel arms arranged to extend outwardly at right angles to the back-support.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 17th day of March, A. D. 1896.

GEORGE T. JOHNSON.

Witnesses:

G. C. MATHER,
ALBERT H. GRAVES.