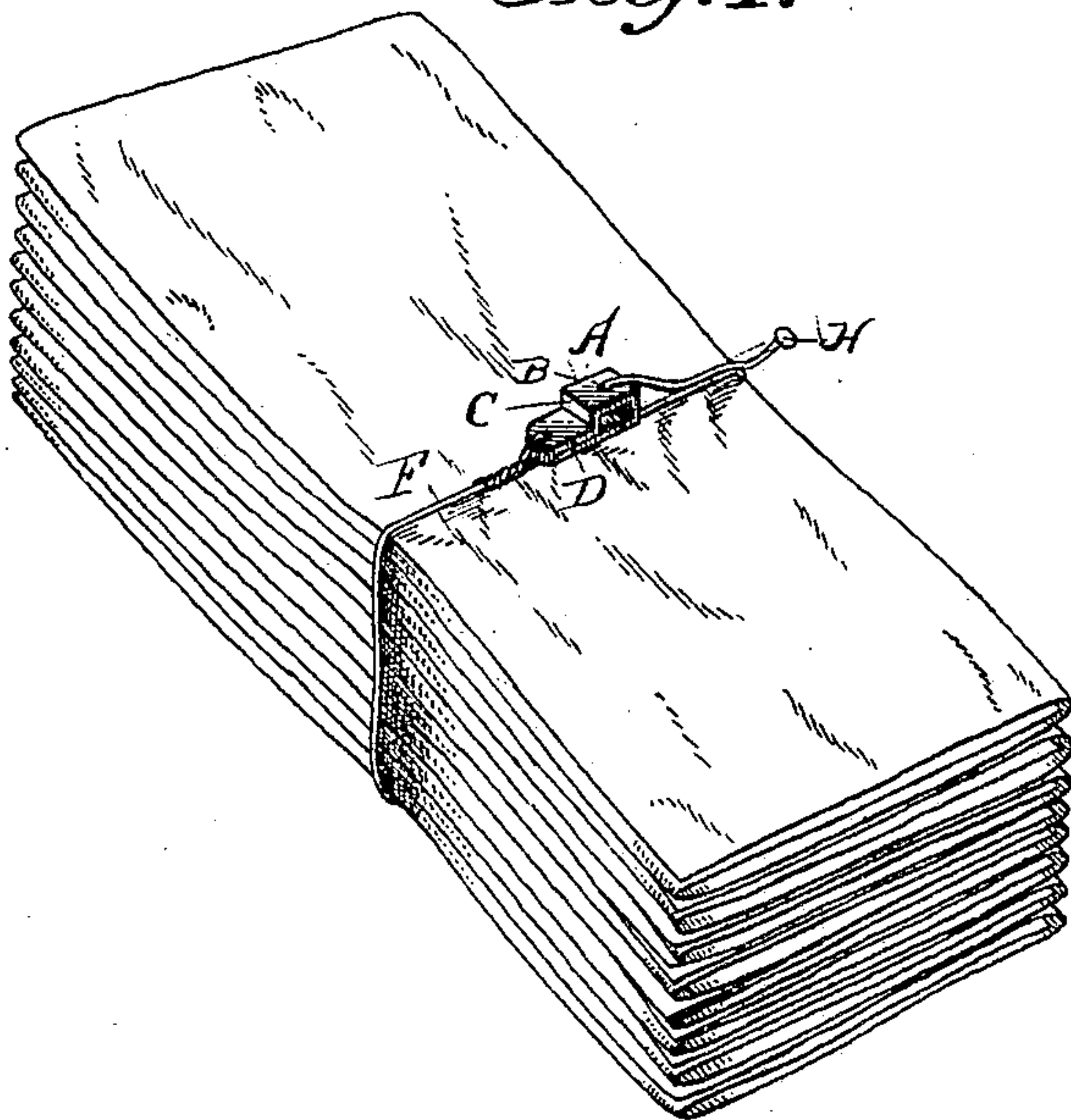


No. 819,648.

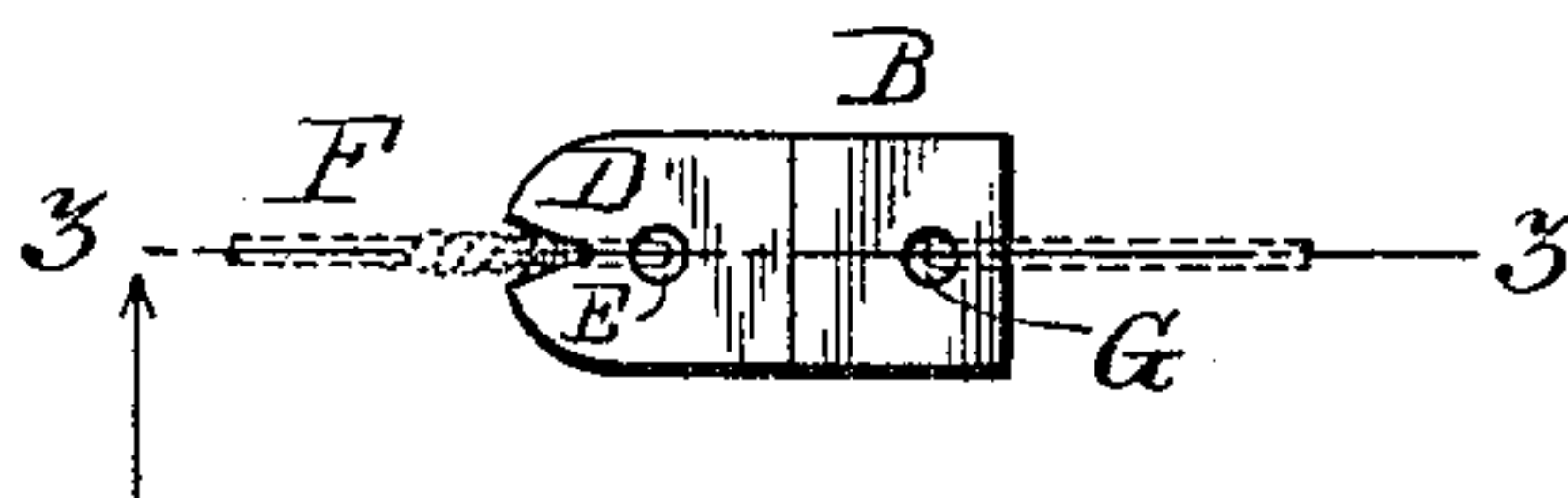
PATENTED MAY 1, 1906.

J. A. GRAY.  
PACKAGE TIE.  
APPLICATION FILED JAN. 21, 1903.

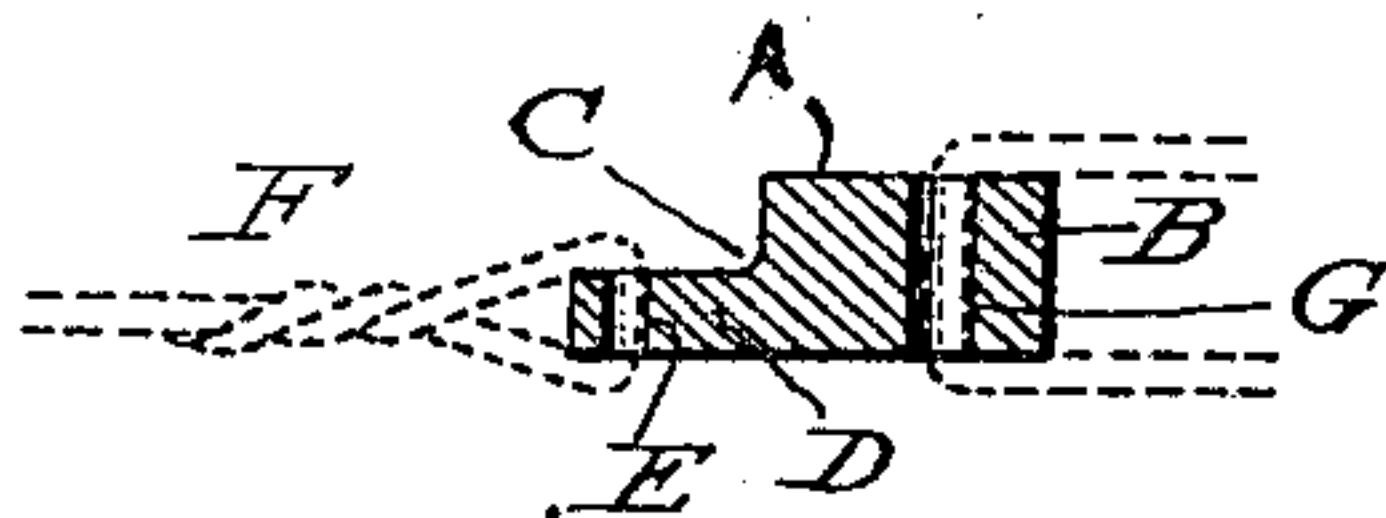
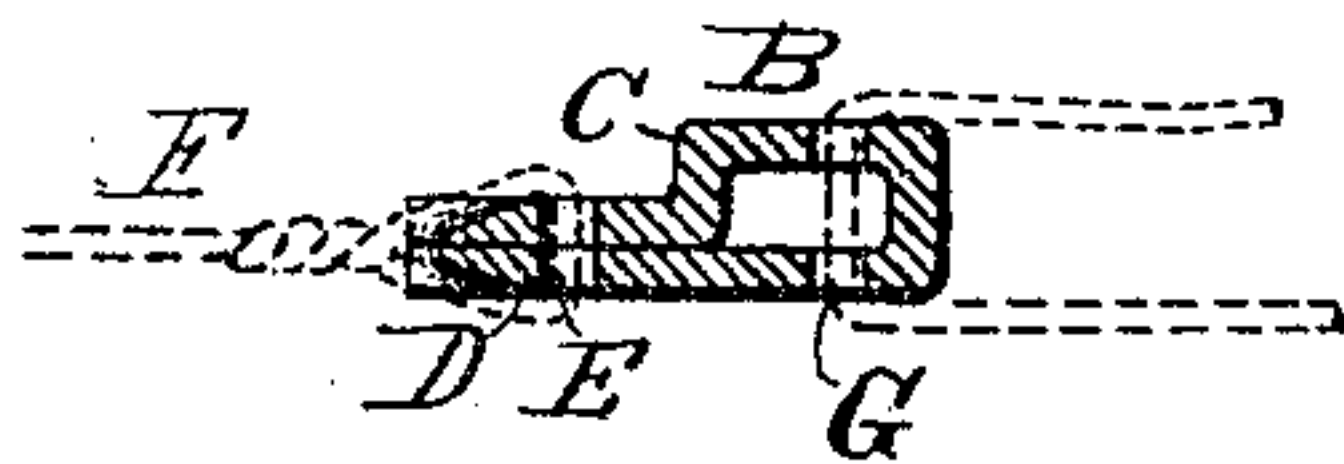
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

Witnesses  
*Chas. J. Claggett*  
*Walter J. Hartig.*

Inventor  
*Joseph A. Gray*  
By his Attorneys  
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# UNITED STATES PATENT OFFICE.

JOSEPH A. GRAY, OF NORWALK, CONNECTICUT.

## PACKAGE-TIE.

No. 819,648.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed January 21, 1903. Serial No. 139,912.

*To all whom it may concern:*

Be it known that I, JOSEPH A. GRAY, a citizen of the United States, and a resident of Norwalk, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Package-Ties, of which the following is a specification.

In the drawings forming part of this specification, Figure 1 is a view in perspective, showing the tie applied to a package of papers. Fig. 2 is a plan view of the fastening device. Fig. 3 is a central vertical section of the same. Fig. 4 is a view of a modification.

The clamp or fastening piece A, I make preferably of sheet metal bent on itself to a form clearly shown in Figs. 1 and 3, the two parts being separated at one end to form a comparatively deep or thick portion B and then bent down again to form an abrupt shoulder or offset C. The two parts of the material are then brought close together to form the narrow part D. The part D is provided with a hole E, through which is passed a soft wire F, which is secured in place by twisting or in any suitable manner. The other end of the soft wire F is passed through holes G in the parts forming the thickened portion of A. If desired, the end of the soft wire may be provided with a knob or bead H of a size sufficient to prevent the wire being pulled out through the hole G. This knob is of any suitable material and secured in any suitable way to the wire. In this form the fastener is always in the form of a loop.

In use the loop is passed over the package, the thumb is pressed against the ledge or offset C, and the wire pulled until it is taut around the package. The pressure of the thumb against the ledge C prevents the tie from slipping. When the desired degree of tightness is reached, the wire is simply turned down, as shown in Fig. 1, and the package is held securely. When it is desired to release the package, the end of the wire F is lifted up, and a slight pull on the clamping device A is sufficient to loosen the wire, which can then be drawn through to any extent desired. It will be seen that the tie may be used over and over again, as the wire being of soft metal will not break.

I may, if desired, make the clamping-piece or fastening-piece solid, as shown at A' in Fig. 4 of the drawings.

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

1. A package-tie consisting of a metal wire having attached to one end a metal fastening-piece composed of sheet metal bent upon itself in such shape as to form an offset at the other end thereof, said offset having an orifice distant from the ledge through which the other end of the wire is threaded, said offset forming a ledge which extends across the surface of said fastening-piece, substantially as described.

2. A package-tie consisting of a metal wire having attached to one end a metal fastening-piece composed of sheet metal bent upon itself in such shape as to form an offset forming a ledge which extends across the surface of said fastening-piece, said offset having an orifice distant from the said ledge through which the other end of the wire is threaded, said wire being provided with a knob sufficient to prevent the wire being pulled through said orifice, substantially as described.

3. A clamping-piece for metallic ties comprising a piece of metal having a thickened portion composed of sheet metal bent upon itself in such shape as to form an offset at one end forming a ledge across the surface of the plate, said offset having an orifice distant from the ledge, substantially as described.

4. A clamping-piece for metallic ties composed of sheet metal bent upon itself in such shape as to form a double thickness at one end and a substantially rectangular raised portion at the other end, with orifices through each of said ends, substantially as described.

5. A package-tie consisting of a wire having attached to one end thereof a fastening-piece, said fastening-piece having an offset at the opposite end, the offset forming a ledge which extends across the surface of said fastening-piece, and said fastening-piece having an opening passing substantially at right angles therethrough and at a distance from the ledge through which the end of the wire is threaded.

In testimony whereof I have hereunto set my hand this 16th day of January, 1903.

JOSEPH A. GRAY.

In presence of—

HERBERT R. SMITH,  
HORACE M. GRAY.