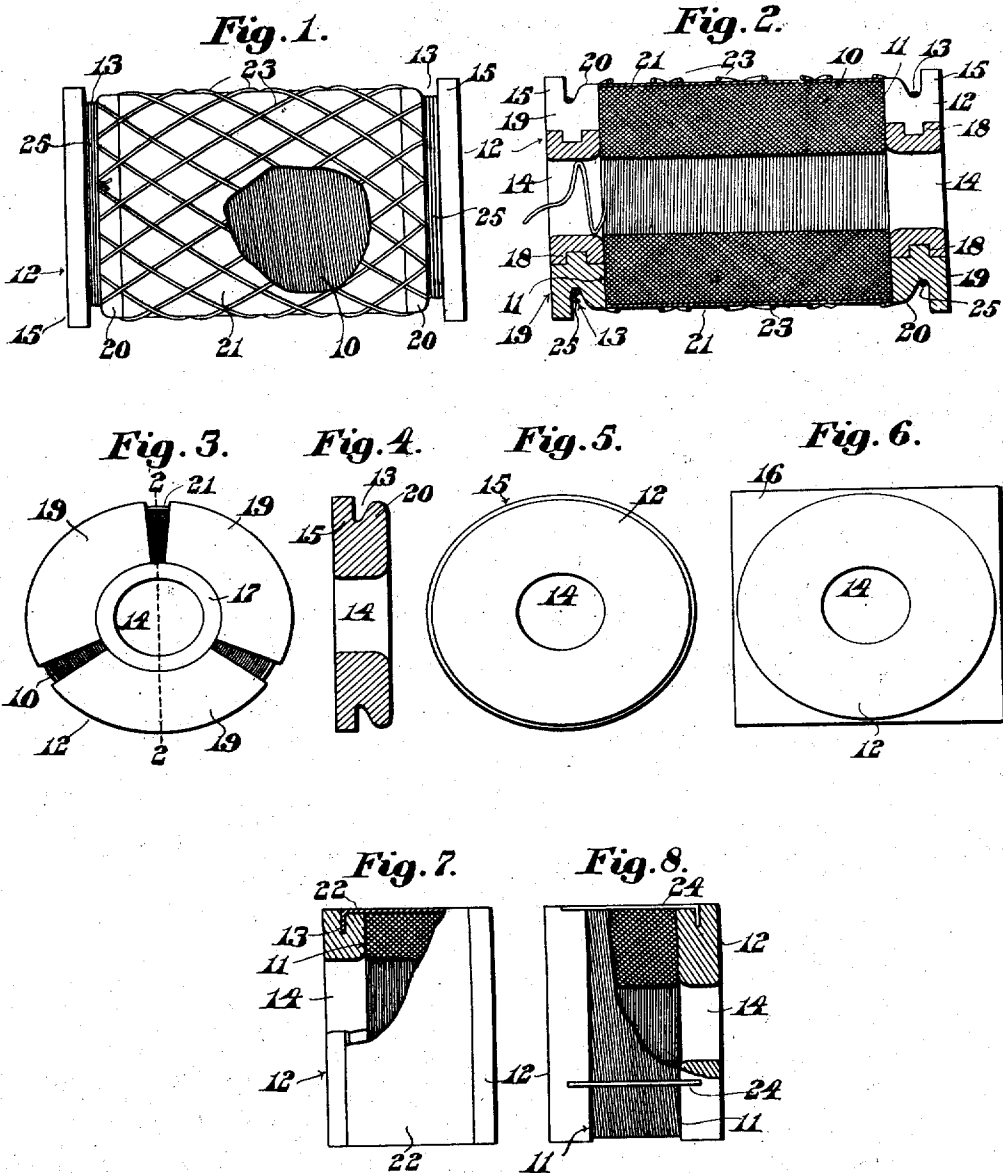


No. 856,173.

PATENTED JUNE 4, 1907.

C. P. MITCHELL.  
PACKAGE.  
APPLICATION FILED JULY 18, 1906.



**Witnesses:**

Nathan L. Lombard  
Howard Hanscom

**Inventor:**

Charles P. Mitchell,  
by Walter E. Lombard,  
Atty.

# UNITED STATES PATENT OFFICE.

CHARLES PAUL MITCHELL, OF ARLINGTON HEIGHTS, MASSACHUSETTS.

## PACKAGE.

No. 856,173.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed July 18, 1906. Serial No. 326,716.

*To all whom it may concern:*

Be it known that I, CHARLES PAUL MITCHELL, a citizen of the United States of America, and a resident of Arlington Heights, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Packages, of which the following is a specification.

This invention relates to packages and has for its object the production of a package adapted particularly to support coils of wire, cord, or similar material to retain the coils in position and prevent them from collapsing or losing their shape until the last coil is used.

It consists primarily of two heads of any desirable material disconnected one from the other between which is interposed a coil of material and around which and over the edges of the heads is wound a binding member securely holding the heads together, thus preventing the coil from changing its original shape.

The invention consists further in several details of construction and arrangement of parts which will be thoroughly understood by reference to the description of the drawings and to the claims to be hereinafter given.

Of the drawings: Figure 1 represents an elevation of a package embodying the features of this invention. Fig. 2 represents a longitudinal section of the same on the line 2—2, Fig. 3. Fig. 3 represents an end view of the same. Figs. 4 and 5 represent, respectively, a section and an elevation of a modified form of head, the entire head being made integral. Fig. 6 represents a modified form showing a solid head with its outer portion square. Fig. 7 represents a side view, in part section, of a package in which the heads are shown secured together by means of a wrapping of metal, and Fig. 8 represents a side view, in part section, of a package in which the heads are shown secured together by means of a plurality of connecting clamps.

Similar characters designate like parts throughout the several figures of the drawings.

In the drawings, 10 represents a coil of any suitable material such as wire, cord, etc., the ends 11 of which are built up square, as shown in Fig. 2. Against each of the ends 11 is placed a head 12 provided with an annular groove 13 around the periphery thereof. Each of the heads 12 is provided with a central opening 14 through which the material forming the coil 10 may be drawn for use.

The outer flange 15 of the heads may be round, as shown in Figs. 3 and 5, or may be square, as shown in Fig. 6, at 16.

The head 12 may be made up of a central eye 17 having an annular groove 18 therein to which is fitted a plurality of segments 19, or said head may be made up of one piece of material, as shown in Figs. 4, 5, and 6. When the coil 10 has been wound until the outer layer reaches the diameter of the inner flange 20 of said head a piece of paper or other material 21 is wrapped around the coil to protect the same from becoming soiled or otherwise injured. This wrapper 21 having been placed upon the coil to envelop the same, a binding member 23 is placed upon the outer periphery of the wrapped coil, said binding member overlapping the flange 20 of the heads and extending into the annular groove 13 thereof. The overlapping of said binding member into the annular groove 13 secures the heads 12 tightly against the ends 11 of the coil 10 and prevents lateral extension thereof while that portion of the binding member 23 about the periphery of the coil prevents any transverse expansion as might be the case where the coil is made up of wire wound with considerable tension. The heads thus connected together by means of the binding member 23, which may be wound closely or openly as shown, provide a package of considerable rigidity which retains its shape in transit and protects the material from deterioration or damage. The paper or other material 21 may, instead, be placed and secured outside of the binding member 23 and extend from head to head covering, and in some instances entering, the annular grooves 13, or said material 21 may be used in both positions, and in either position it may be stiff enough to prevent lateral movement of either head that would crush a loosely wound coil 10 within the package.

The binding member 23 may be composed of a continuation of the material forming a part of the coil 10 or may be of some other material if desired. Where expensive materials are used to form the main coil 10 the binding member 23 may consist of a cheaper material which would lessen the loss if it is to be thrown aside when the coil has been expended; or it may be of different material, as for instance, the coil 10 may be of cotton and the binding member 23 of wire.

If desired a few wrappings may be

wound around the overlapping portions of the binding member 23 to secure them more firmly in position in said grooves 13 and to retain the segments 19 of said heads 12 in position. It is obvious that one or both heads may be square in the same package which would prevent rolling of the package when placed upon its side.

A wrapping 22, Fig. 7, of metal, leather board or similar material, may be secured upon the coil 10 to envelop the same the bent edges of said wrapping 22 entering the grooves 13 and thus connecting the two heads; or a plurality of clamps 24, Fig. 8, may connect the heads, the bent ends of said clamps being driven into the periphery of each head. For some purposes packages having heads thus connected by a plurality of clamps 24 would be complete, but it is desirable to more securely hold them in position by means of the binding member 23 which may begin and end between the ends 11 of the coil 10.

The principal object of the invention is to provide heads at both ends of a package and to secure the coil of material forming a part of the package to said heads by a connector which passes over the material of the coil and ties it firmly to the heads so that the package will be retained in shape until the coil is wholly expended. The opening 14 in one or both of the heads is of sufficient size to afford examination of and access to the material within the package. The heads of a package may differ one from

the other in size, shape, material, or in number of parts.

It is believed that from the foregoing the invention will be thoroughly understood without any further description.

#### Claims.

1. The combination of a coil of material; an annular head therefor at each end of said coil consisting of a central eye and a plurality of surrounding segments; and a plurality of connectors extending from one head to the other to secure the entire package together.

2. The combination of a coil of material; an annular grooved head therefor at each end of said coil consisting of a central eye and a plurality of surrounding segments; and a plurality of connectors extending from the groove of one head to the groove of the other to secure the entire package together.

3. The combination of a coil of material having a central opening extending there-through; an annular head at either end thereof the inner face of which is entirely outside of the end of said coil; and means extending from the edge of one head to the edge of the other head outside of the periphery of said coil to secure the entire package together.

Signed by me at Boston, Massachusetts, this 17th day of July, 1906.

CHARLES PAUL MITCHELL.

Witnesses:

WALTER E. LOMBARD,  
EDNA C. CLEVELAND

Correction in Letters Patent No. 856,173.

It is hereby certified that in Letters Patent No. 856,173, granted June 4, 1907, upon the application of Charles Paul Mitchell, of Arlington Heights, Massachusetts, for an improvement in "Packages," an error appears in the printed specification requiring correction as follows: Page 1, line 11, for the word "or" read *of*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 25th day of August, A. D., 1914.

[SEAL.]

J. T. NEWTON,

*Acting Commissioner of Patents.*

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3. The combination of a coil of material having a central opening extending there-through; an annular head at either end thereof the inner face of which is entirely outside of the end of said coil; and means extending from the edge of one head to the edge of the other head outside of the periphery of said coil to secure the entire package together.

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