

F. J. PALMER.
HINGE.

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1,063,136.

Patented May 27, 1913.

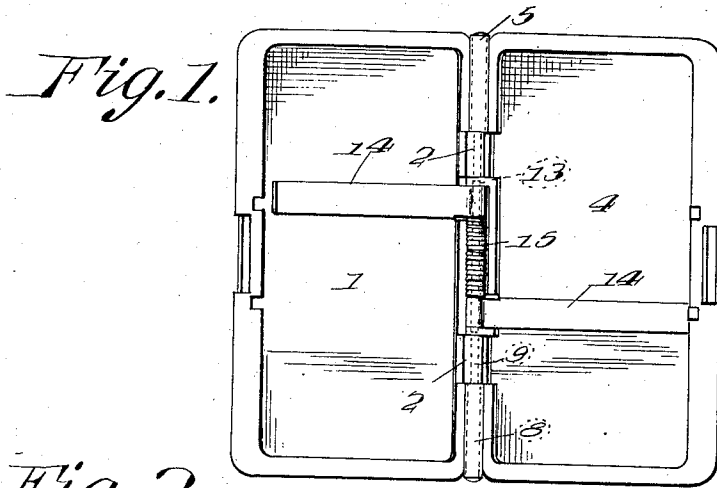


Fig. 2.

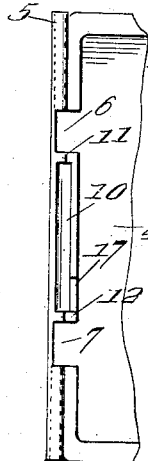
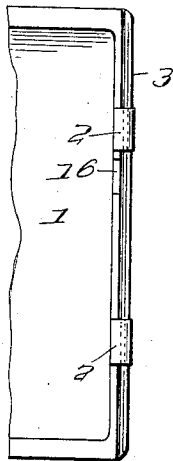


Fig. 3.

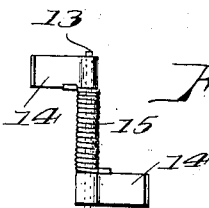


Fig. 4.

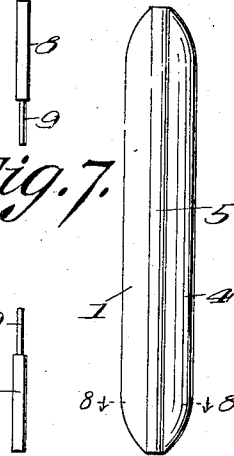


Fig. 5.

Fig. 6.

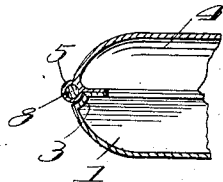


Fig. 7.

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HINGE.

1,063,136.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK J. PALMER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Hinges, of which the following is a specification.

This invention relates to certain new and useful improvements in hinges, and pertains more particularly to hinges used to connect the two sections of a cigarette case.

The primary object of the invention is to provide a hinge joint of new, novel and improved structure which presents a neat and pleasing appearance, and which eliminates the unsightly joints that are commonly used in cases of the type mentioned.

In the drawings; Figure 1 is a plan view of the invention showing the case in open position. Fig. 2 is a fragmentary plan view of one of the sections showing the spring actuated retaining arms and the hinge pintles removed. Fig. 3 is a view similar to Fig. 2 of the other section. Fig. 4 is a rear side elevation of the hinge structure when the case is closed. Fig. 5 is a detached front elevation of the spring retaining arms and the mounting means thereof. Figs. 6 and 7 are plan views of the hinge pintles, and Fig. 8 is a fragmentary sectional view on the line 8—8 of Fig. 4.

Section 1 is formed with a pair of perforated knuckles 2 which knuckles are spaced apart and arranged at the rear side of section 1 so as to overlie a concave groove 3 formed on said side of the section 1. The section 4 has its rear side provided with a tube 5 that is secured thereto in any suitable manner, the tube being received in the concave groove 3 of section 1, whereby from Figs. 4 and 8 of the drawings it will be observed that the tube 5 which is continuous and unbroken throughout on its rear side presents a neat and pleasing appearance, and eliminates the presence of any exposed pintles or knuckles on the exterior of the case. Tube 5 is cut away at 6 and 7 to receive the knuckles 2, and after the knuckles are received in said cut away portions, pin-

tles 8 are inserted in the ends of the tube 5 and have reduced portions 9 that are received in the perforations of the knuckles. The tube 5 is further cut away as indicated at 10 in Fig. 3, the cut away portion 10 leaving the parts 11 and 12 that serve to receive the ends of a pin 13 which is received in the tube 5 in the cut out portion 10 thereof, and which has a retaining arm 14 mounted on each of its ends. A coiled spring 15 encircles pin 13 and has its opposite ends engaging arms 14 as depicted in Figs. 1 and 5, and since the arms 14 engage the sections 1 and 4, it will be apparent that the spring arms will serve to force the sections outwardly to open position, when a catch which is placed at opposite sides of the sections, is released. Section 1 is cut away at 16 to receive one of the arms 14, while the tube 5 is cut away at 17 to receive the other arm 14.

From the above it will be apparent that the tube 5 has its continuous unbroken side exposed, the remainder of the hinge structure being received on the interior of the tube so as not to be exposed, except, when the case is open. It will further be apparent, that the hinge joints, are entirely independent of the spring retaining arms, which latter serve to normally force the section apart.

Having thus described my invention, I claim as new and desire to secure by Letters Patent;—

1. In combination with a pair of sections, one of said sections having a concave groove at its rear side, an exposed tube of the same length as that of the sections secured to the rear side of the other section and being received in said groove, and means to hingedly connect the tube to the first named section the exterior exposed portion of said tube being continuous and unbroken.

2. In combination with a pair of sections one of which has a concave groove throughout its length and a pair of perforated knuckles which project over the groove in spaced relation thereto, an exposed tube the exterior of which is continuous and un-

broken secured to the other section and extending throughout the length of the latter and projecting in said groove and having cut-away portions to receive the knuckles,
5 and means to secure the knuckles to the tube passed through the perforations of the knuckles.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK J. PALMER.

Witnesses:

ADA E. HAGERTY,
J. A. MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."