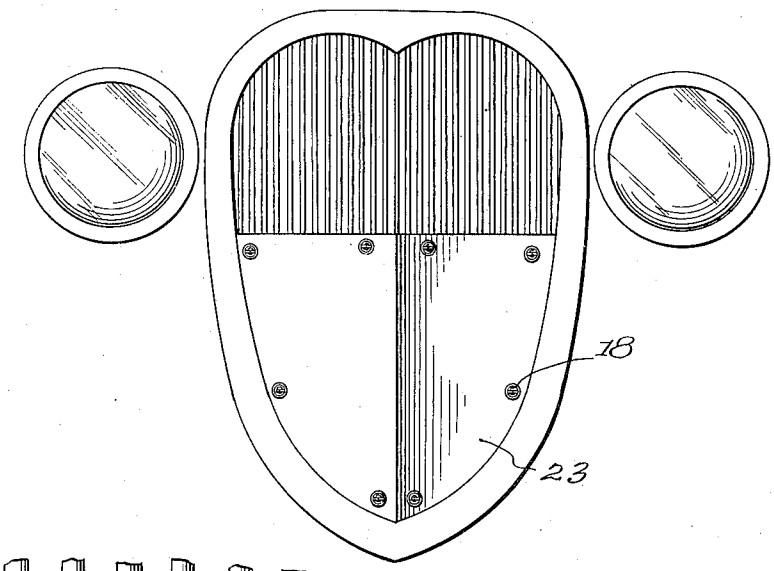
April 13, 1937. W. B. KAMEN 2,076,726

ATTACHING CLIP

Filed Jan. 6, 1937

Fig. 1.



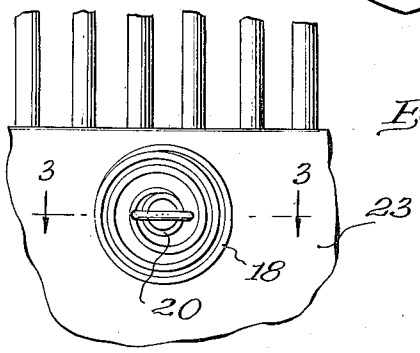




Fig. 2.

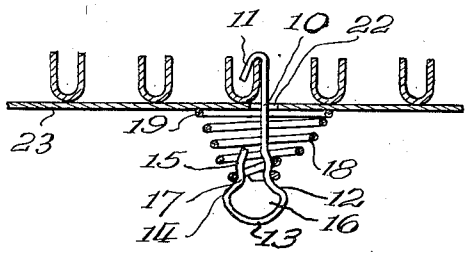
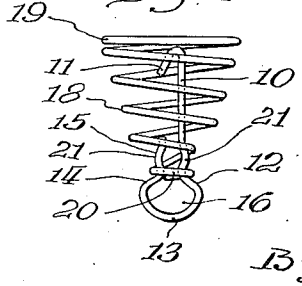



Fig. 3.

Fig. 4.




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Patented Apr. 13, 1937 2,076,726

# UNITED STATES PATENT OFFICE

2,076,726

## ATTACHING CLIP

Willard B. Kamen, Chicago, Ill.

Application January 6, 1937, Serial No. 119,188

2 Claims. (Cl. 24—261)

This invention relates to an improved construction of clip fastener particularly adapted for detachably securing a fabric or pliable covering over the front of an automobile radiator or guard grille thereof, for the purpose of holding said fabric or covering in operative position on the grille.

The main object of the invention is to provide a clip fastener of the character described, which will be simple and inexpensive to make, comprising a resilient spring member and a hook member which may be separately manufactured at a minimum cost, and then assembled as a unit with the members disposed in such relation, one to another, that they may not accidentally become separated.

A further object of the invention is to provide an attaching clip of the character described, comprising a hook member and a resilient spring member which may be assembled as a unit, said hook member being so constructed that when in an assembled position with the resilient spring member, may not accidentally become separated therefrom, but which at the same time may be readily and conveniently assembled or disassembled from said resilient spring member.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention consists in certain novel features of construction, arrangement and combination of parts hereinafter more fully described and illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the construction may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Referring to the drawing, in which the same characters of reference are employed to designate corresponding or similar parts throughout the several figures of the drawing:

Fig. 1 is a diagrammatic front elevational view of the front of an automobile, illustrating a radiator cover applied and securely held in place over the front part of the radiator guard by a plurality of my improved clip fasteners;

Fig. 2 is an enlarged plan view of the fastener in position for securing a cover to the bars of a grille guard for an automobile radiator front;

Fig. 3 is a sectional view taken substantially on line 3—3 of Fig. 2; and

Fig. 4 is an elevational view of my improved fastener.

In the embodiment illustrated, the reference character 10 designates generally a stem or hook member formed of wire, bent at one end to provide a suitable hook 11 for engaging with a grille bar, or the like, of a radiator guard, or bars or tubes of a radiator. The other end of said stem is bent first outwardly and forwardly to produce the inclined portion 12, then in a semi-circular formation to produce the portion 13, then inwardly towards the body of the stem to produce the inclined portion 14, and then inwardly to produce the portion 15, which is a short extension arranged in substantially parallel spaced relation to the shank portion of the stem. This operation forms a head or finger hold 16, and as shown in the drawing, there is also produced a reduced neck portion 17 for a purpose to be presently more fully described.

The spring member 18 with which the member 10 is to be assembled is preferably of conical shape, whereby the largest convolution 19 may form a suitable base to bear against the cover member, and its smallest convolution 20 provided at the opposite end thereof, is of such a size as to snap into engagement with the reduced neck portion 17 of the hook element 10, and to be held in place thereon by the resiliency of the material out of which the stem is made. It will be noted that the portion 15 is spaced a sufficient distance from the shank 10, and both said shank and said portion 15 are provided with the enlarged portion 21 to permit the said convolution 20 to snap past the same for disposition on the reduced neck portion 17, and to thereby resiliently hold the said spring member and hook member in assembled position. A slight pressure upon the portion 14 of the finger hold 12 will permit the disassembly of the hook member from the spring member.

It has been found that the forming of the hook member and the spring as separate elements results in a cheaper construction, as this procedure eliminates the necessity of complicated bending operations, thus resulting in a saving in both labor and manufacturing cost.

To attach the covering to the radiator or guard grille, the hook end 11 of the stem is inserted through an aperture 22 in the cover 23, and the hook member pressed inwardly between a pair of bars of the grille guard, to a depth which will enable the hook end 11 to be hooked to the rear side of a bar, as shown in Fig. 3. The spring, under its compressed condition, yieldingly binds the hook member to a bar and clamps the portion of the cover engaged against the front side of the bar of the radiator front. Any number

of clips of the type illustrated, sufficient to properly hold the cover in place may be employed, the said clips being distributed preferably about the margin of the cover, and the appropriate locations for hooking with a bar of the radiator guard or radiator itself.

From the above, it will be apparent that there are several advantages which may be had in the construction of a fastener in the manner disclosed herein. A fastener of this character is extremely economical to make, as the spring element comprising the same, involves only the simplest of turning operations and may be readily formed from a continuous piece of wire. The hook member associated with the spring can also be manufactured at a minimum cost, and may also be formed from a single piece of wire. It will also be noted that the two elements may be readily assembled and disassembled, and when once in assembled position they may not accidentally become separated.

It is believed that my invention, its mode of construction and assembly, and method of construction, and many of its advantages should be readily understood from the foregoing, without further description, and should also be manifest that while a preferred embodiment of the invention has been shown and described for illustrative purposes, the structural details are, nevertheless, capable of wide variation within the purview of my invention as defined in the appended claims.

What I claim and desire to secure by Letters Patent of the United States is:

1. A fastener comprising a conically coiled wire spring of which the smallest convolution at one end is adapted to serve as a retaining ring, and the largest convolution at the other end is adapted to serve as a base, and a stem passing axially through said spring, said stem having an enlarged head at one end thereof, a reduced neck portion immediately adjacent said head for receiving the retaining ring by means of which the said spring will be held in assembled position with said stem, and a hook portion at the other end of said stem.

2. A fastener comprising a conically coiled wire spring in which the largest convolution thereof is adapted to serve as a base, and the smallest convolution thereof forms a retaining ring, and a stem passing axially through said spring, said stem having a head formed at one end thereof by bending the same upon itself, a reduced neck portion formed adjacent said head for receiving and detachably holding said retaining ring of said spring in operative assembled position on said stem, and a hook portion on the other end of said stem.

WILLARD B. KAMEN.