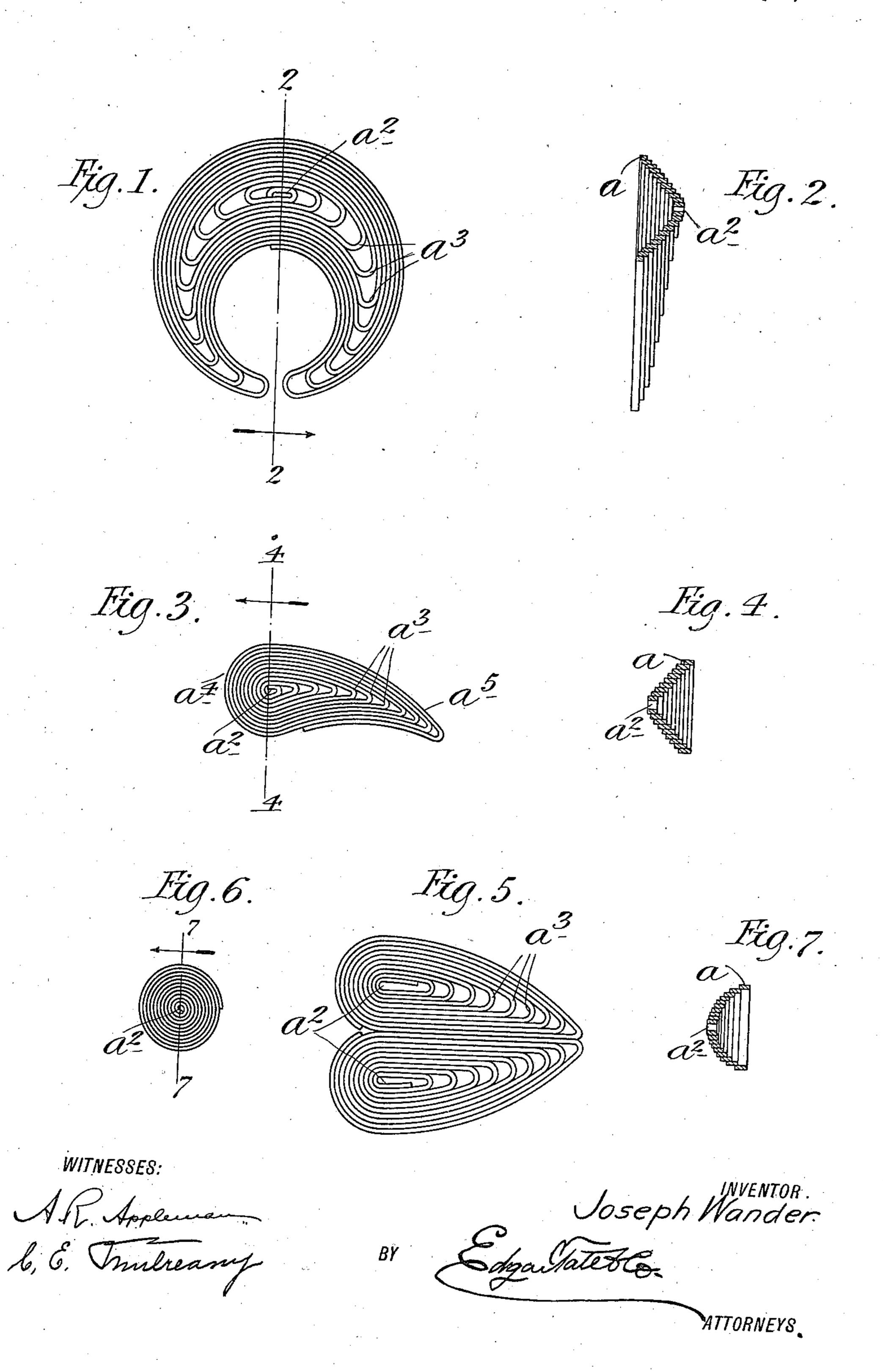
## J. WANDER. METAL ORNAMENT. APPLICATION FILED MAR. 30, 1909.

963,341.

Patented July 5, 1910.



## UNITED STATES PATENT OFFICE.

JOSEPH WANDER, OF WESTBROOK, CONNECTICUT.

METAL ORNAMENT.

963,341.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed March 30, 1909. Serial No. 486,755.

To all whom it may concern:

Be it known that I, Joseph Wander, a citizen of the United States, and residing at Westbrook, in the county of Middlesex and 5 State of Connecticut, have invented certain new and useful Improvements in Metal Ornaments, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and 10 use the same.

This invention relates to ornaments of various kinds and classes and designed to serve as pins, brooches or badges and for various other purposes; and the object there-15 of is to provide a device or devices of this class composed entirely of flexible wire adapted to be wound and pressed into different shapes or styles of configuration; and with this and other objects in view, the in-20 vention consists in a device or devices of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accom-25 panying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a plan view of a metal orna-30 ment made according to my invention, Fig. 2 a transverse section thereof on the line 2-2 of Fig. 1, Fig. 3 a view similar to Fig. 1, but showing another shape or form of ornament made according to my invention, Fig. 4 a transverse section on the line 4—4 of Fig. 3, Fig. 5 a view similar to Figs. 1 and 3, but showing another shape or form of ornament in which two separately formed metal ornaments are united to produce a 40 single ornament, Fig. 6 a view similar to Figs. 1 and 3 and showing another shape or form of ornament, and;—Fig. 7 a transverse section on the line 7—7 of Fig. 6.

In Figs. 1 and 2 of the accompanying 45 drawing I have shown a metal ornament of crescent shape, and in the practice of my invention I take a piece of wire of any predetermined length and which is preferably flat or oblong and rectangular in cross section as clearly shown at  $\alpha$  in Fig. 2, and one end of this wire is bent to form a loop, ring or eye  $a^2$  around which the rest of the wire is folded or wrapped in successive coils, the diameters of which increase successively, and the device thus produced is compressed laterally or formed into a crescent shape as

shown in Fig. 1, and at the same time the separate coils or convolutions thereof are forced outwardly in one direction so as to give the body portion of the ornament a sub- 60 stantially convexo-concave form in cross section. When the ornament is completed in the manner described, the side portions or arms of the crescent are provided centrally with apertures  $a^3$ , the dimensions of which 65 will depend on the amount of the increase in the dimensions of the separate coils or convolutions of the wire as said coils or convolutions are formed, but the difference in these dimensions may be so regulated that 70 these apertures may be very small or may almost entirely disappear.

In Figs. 3 and 4 I have shown another form or style of ornament which is made in the same manner as that shown in Figs. 1 75 and 2, but this ornament, as will be seen, comprises a main or head portion  $a^4$  having

a single tapered member  $a^5$ 

In Fig. 5 I have shown a heart-shaped ornament consisting of two separate parts 80 or ornaments similar to that shown in Fig. 3 secured together, and it will be understood that in practice any number of ornaments made in this manner and of any desired shape may be connected to form clusters or 85 combinations of various kinds and classes and of almost any desired form or configuration.

In Figs. 6 and 7 I have shown another form of construction in which the ornament 90 is circular in form, and in which there are no apertures or openings except a possible aperture or opening at the center. It will be understood, that in practice the separate coils of my improved metal ornaments of 95 any desired shape or configuration are secured together so as to permanently hold them in the desired shape or position, and when a number of ornaments of this class are connected as shown in Fig. 5 or in order to form 100 clusters or bunches of any form or configuration, the said separate coils or devices are also secured together in the same manner, and this may be done by soldering or in any other way.

In the accompanying drawing Figs. 2 and 4 represent the ornaments shown in Figs. 1 and 3 as pyramidal in cross section instead of convexo-concave as hereinbefore described, but the latter form is shown in Fig. 110 7 and either cross sectional shape may be employed as desired.

It will be understood that in forming ornaments of the shape shown in Figs. 6 and 7, the separate coils of wire are wound tightly. together and are secured together, and the 5 device thus formed is then compressed into the concavo-convex shape as shown in Fig. 7, or the separate coils of wire may be secured together after the device has been compressed into the shape shown in Fig. 7. It 10 will also be seen that all of the forms of construction shown involve a central coil  $a^2$  and each ornament made according to my invention involves a body or head portion in the center of which the central coil  $a^2$  is formed 15 and the wire or strip is then successively coiled around said central portion, and it will be observed that all of the successive coils are closely adjacent, except in some forms of construction in which the coils are 20 enlarged and so formed that the device is tapered in one or more directions from the central coil, the successive coils being formed as shown in Figs. 1, 3 and 5, so as to form the open spaces  $a^3$ , and with these limita-25 tions the taper of the device in either or both directions may be of any desired form or shape.

The wire employed may be composed of gold, silver, platinum or any other metal, 30 and ornaments may, as will be understood, be made into very many different forms and may also be made very handsome and attractive, and if desired they may be made to serve as settings for precious stones of any

35 kind or class.

Having fully described my invention, what I claim as new and desire to secure by

Letters Patent, is:—

1. A metal ornament composed of flat 40 wire formed into a spiral coil, the successive coils being secured together and the central portion of the device being pressed outwardly in one direction to make said ornament concavo-convex in cross section.

2. A metal ornament composed of flat wire formed into a spiral coil, the separate coils being closely adjacent and secured together, and said device comprising a main body or head portion having a lateral ta-50 pered extension or extensions, and the central portion of the device being forced out-

wardly so as to make the same concavo-convex in cross section.

3. A metal ornament composed of flat wire formed into a spiral coil, the separate 55 coils being closely adjacent and secured together, and said device comprising a main body or head portion having a lateral tapered extension or extensions, and the central portion of the device being forced out- 60 wardly so as to make the same concavoconvex in cross section, and the extension or extensions being provided with apertures formed by the coils the diameters of which are successively increased.

4. A metal ornament composed of wire formed into a spiral coil, said device comprising a main body or head portion having a laterally tapered extension or extensions, the separate coils being closely adjacent and 70 secured together and the central portion of the device being pressed outwardly in one direction to make said ornament concavo-

convex in cross section.

5. A metal ornament composed of flat 75 wire formed into a spiral coil, said device comprising a main body or head portion having a laterally tapered extension or extensions, the separate coils being closely adjacent and secured together and the central 80 portion of the device being pressed outwardly in one direction to make said ornament concavo-convex in cross section and the extension or extensions being provided with apertures between each part or coil.

6. A metal ornament composed of a number of devices formed from flat wire bent into a spiral coil, said devices comprising a main body or head portion having a laterally tapered extension or extensions, and the cen-90 tral body or head portion being pressed outwardly in one direction to make the same

concavo-convex in cross section.

In testimony that I claim the foregoing as my invention I have signed my name in 95 presence of the subscribing witnesses this 22nd day of March 1909.

JOSEPH WANDER.

Witnesses:

FRIEND G. DICKINSON, WILLIAM A. WILCOX.