

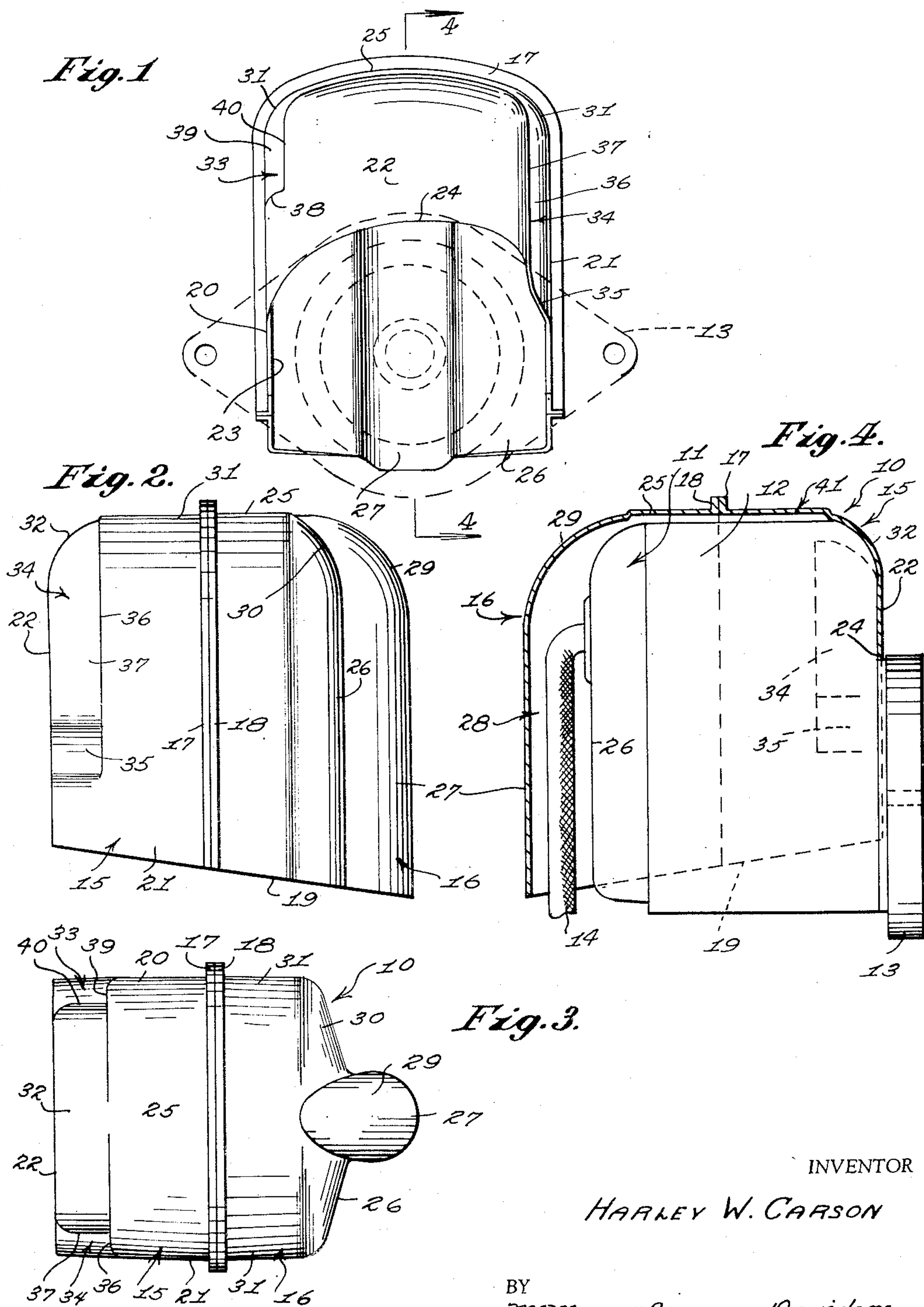
Oct. 31, 1950

H. W. CARSON

2,527,704

PROTECTIVE COVER FOR MAGNETOS

Filed Nov. 29, 1949



INVENTOR

HARLEY W. CARSON

BY

McMorrow, Bermann & Davidson
ATTORNEY

ATTORNEY

UNITED STATES PATENT OFFICE

2,527,704

PROTECTIVE COVER FOR MAGNETOS

Harley W. Carson, Caprock, N. Mex.

Application November 29, 1949, Serial No. 129,977

2 Claims. (Cl. 171—209)

1

My invention relates to a protective cover for magnetos and the like.

A primary object of my invention is to provide a magneto cover designed to prevent moisture caused by precipitation or condensation from collecting on or coming into contact with the magneto.

A further object is to provide a magneto cover which is highly simplified, unitary, light and inexpensive to manufacture.

A further object is to provide a cover of the above-mentioned character formed of plastic material which is a poor conductor of heat.

A still further object is to provide a magneto cover which has a friction fit upon the casing of the magneto and which is readily removable when desired.

A further important object is to provide a protective covering for magnetos which are used under conditions where they are exposed to the elements, such as upon certain oil well machinery, it being well known that when new, the magneto is substantially weatherproof, but after shop repair and field service often fails, due to the presence of moisture.

A further object is to provide a protective cover for types of magnetos which are not adequately housed, and thereby greatly reduce the percentage of failures among magnetos of this type, due to the presence of moisture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application, and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is an end elevation of a magneto cover embodying my invention and showing the same applied to a magneto;

Figure 2 is a side elevation of the cover;

Figure 3 is a plan view of the same; and

Figure 4 is a central vertical longitudinal section taken on line 4—4 of Figure 1.

In the drawings, where, for the purpose of illustration, is shown a preferred embodiment of my invention, the numeral 10 designates generally a readily removable cover or casing for a magneto 11 of standard and well known design. The magneto 11 comprises a generally rectangular body portion or casing 12 having an integral, vertically disposed, apertured mounting flange 13 at one end of the casing 12, and including the usual high tension wire or cable 14 leading into the end of the magneto remote from the mounting flange 13.

The cover 10 comprises a pair of opposed housings or cover sections 15 and 16, which are vertically disposed in use, and open at their bottoms and inner ends. The cover sections 15 and 16 are

2

provided at their inner, opposed ends with integral, vertically disposed, companion, flat flanges 17 and 18, permanently and integrally joined together by any suitable means for forming the single unitary cover 10.

The cover 10 thus formed by the casing sections 15 and 16 is entirely open at its bottom 19, and the bottom 19 is preferably formed or biased at a slight inclination with respect to the horizontal, Figures 2 and 4. The opposite sides 20 and 21 of the cover are vertical and generally flat, except for the fact that the joined flanges 17 and 18 project laterally outwardly slightly of the sides of the cover, as shown. One end 22 of the cover is substantially flat and vertically disposed, and the end 22 is provided in its bottom with a large opening 23, extending for the entire distance between the sides 20 and 21 and having a substantially arcuate top edge 24 arranged near and above the vertical center of the cover. The cover 10 further includes a longitudinally straight, slightly transversely curved top 25 and a vertically disposed end 26 remote from the end 22 and being flared longitudinally outwardly slightly, or generally convex, as clearly shown in Figure 3. At the transverse center of the end 26, the cover is provided with a vertically extending, elongated, relatively narrow, hollow projection or rib 27 open at its bottom end and forming a vertical passage or conduit chamber 28 to accommodate the high tension wire 14. The top 29 of the rib 27 is curved, as shown, and blends smoothly into the top 25 of the cover and end 26 thereof. Upon opposite sides of the rib 27, the top corner of the cover connecting the top 25 and end 26 is smoothly rounded, as shown at 30. Likewise, the upper side corners of the cover 10 connecting the sides 20 and 21 with the top 25 are smoothly rounded, as shown at 31. Also, the upper end corner of the cover remote from the rib 27 and connecting the end 22 and top 25 is smoothly rounded, as shown at 32.

Adjacent to the end 22, the cover is provided upon opposite sides and in its top with external, vertically extending, elongated recesses 33 and 34. The recess 34 is vertically longer than the recess 33, as shown, and terminates near and below the top edge 24 of the opening 23 for forming a short, inclined, bottom shoulder 35 blending into the bottom portion of the adjacent, flat, vertical side 21. The recess 34 also forms vertically disposed, narrow, lateral and longitudinal shoulders 36 and 37. The recess 33 likewise terminates in a bottom, rounded end or shoulder 38 arranged near and slightly above the top edge 24. The rounded shoulder 38 blends smoothly into the adjacent, vertical side 20 of the cover. The recess 33 further forms vertically disposed, lateral and longitudinal shoulders 39 and 40 arranged opposite the shoulders 36 and 37 of the recess 34.

All of the above-described detailed construction is provided so that the contour of the cover 10 will conform to the contour of the standard magneto 11. The entire magneto cover 10 is preferably formed of thin, light, substantially rigid plastic material of the type which is a poor conductor of heat. If desired, the cover could be formed of pressed fiber, Bakelite, or similar materials. The cover is strong and durable and may be applied to and removed from the magneto 11 any number of times.

In use, the cover 10 is applied to the magneto 11 from the top of the magneto, the bottom of the cover being entirely open. The end 22 of the cover engages over the right-hand end of the magneto, Figure 4, and is disposed to the inner side of the mounting flange 13, as shown. The large bottom opening 23 of the end 22 receives and straddles the portion or neck of the magneto adjacent to the right-hand end of the magneto casing 12, Figure 4. The sides 20 and 21 of the cover engage about the opposite sides of the magneto casing, as shown, and the hollow rib 27 engages over the high tension wire 14. The cover 10 is frictionally secured to the magneto so that it will not be accidentally displaced. The main points of frictional contact between the cover and magneto are the top, rounded corners 32 and the opposite end portions of the other top, rounded corner 30 upon opposite sides of the rib 27. As shown in Figure 4, the bottom edge 19 extends substantially to the bottom of the magneto.

As shown in Figure 4, between the rounded upper corners 30 and 32, the top of the cover 25 is raised slightly from the top of the magneto casing 12 for forming a narrow, dead air space 41. This dead air space functions as additional heat insulation about the top of the magneto, and prevents fast temperature changes which cause moisture condensation. The cover 10 thus serves to prevent moisture in the form of condensation or precipitation from coming into contact with the casing 12, high tension wire 14, or other parts of the magneto.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in shape, size and arrangement of parts may be resorted to without depart-

ing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A cover adapted to protect a magneto having a mounting flange at one end and a high tension wire extending from the other end, comprising a first housing open at its bottom and at one end adapted to enclose said one end of and the adjacent portion of said magneto and rest upon said mounting flange, a second housing open at its bottom and at one end arranged so that its open end is in face to face abutting relation with the open end of said first housing, said second housing enclosing said other end of and the adjacent portion of said magneto, and means interposed between the abutting open ends of said housings for securing the same together.

2. A cover adapted to protect a magneto having a mounting flange at one end and a high tension wire extending from the other end, said cover comprising a first housing open at its bottom and at one end adapted to enclose said one end of and the adjacent portion of said magneto and rest upon said mounting flange, a flange projecting transversely of said housing adjacent said open end, a second housing open at its bottom and at one end, a second flange projecting transversely of said second housing adjacent said open end, said second housing enclosing said other end and the adjacent portion of said magneto and being arranged so that said second flange is in face to face abutting relation with respect to said flange of said first housing, and securing means interposed between the abutting flanges of said housings for securing the same together.

HARLEY W. CARSON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
791,690	Schmidt	Oct. 4, 1910
1,234,901	Hollister	July 31, 1917
1,685,765	Mangan	Sept. 25, 1928
2,452,248	Lee	Oct. 26, 1948
2,489,517	Brown	Nov. 24, 1949