Dec. 22, 1970 W. L. JENKINS 3,550,118

ELECTRIC BELL CONSTRUCTION

Filed May 20, 1966 3 Sheets-Sheet 1

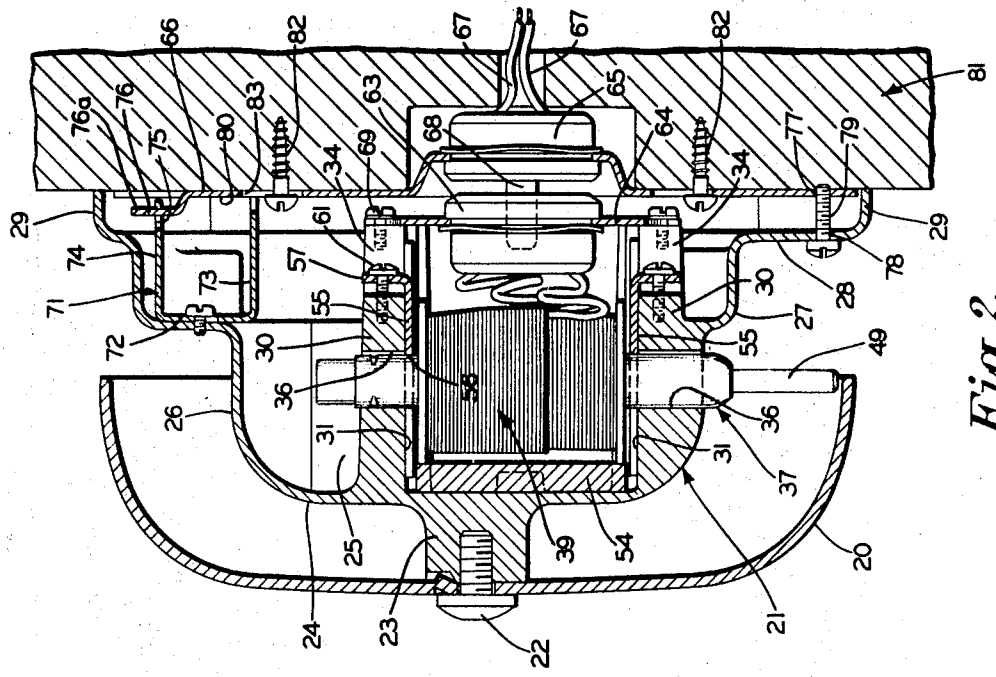

Fig. 2

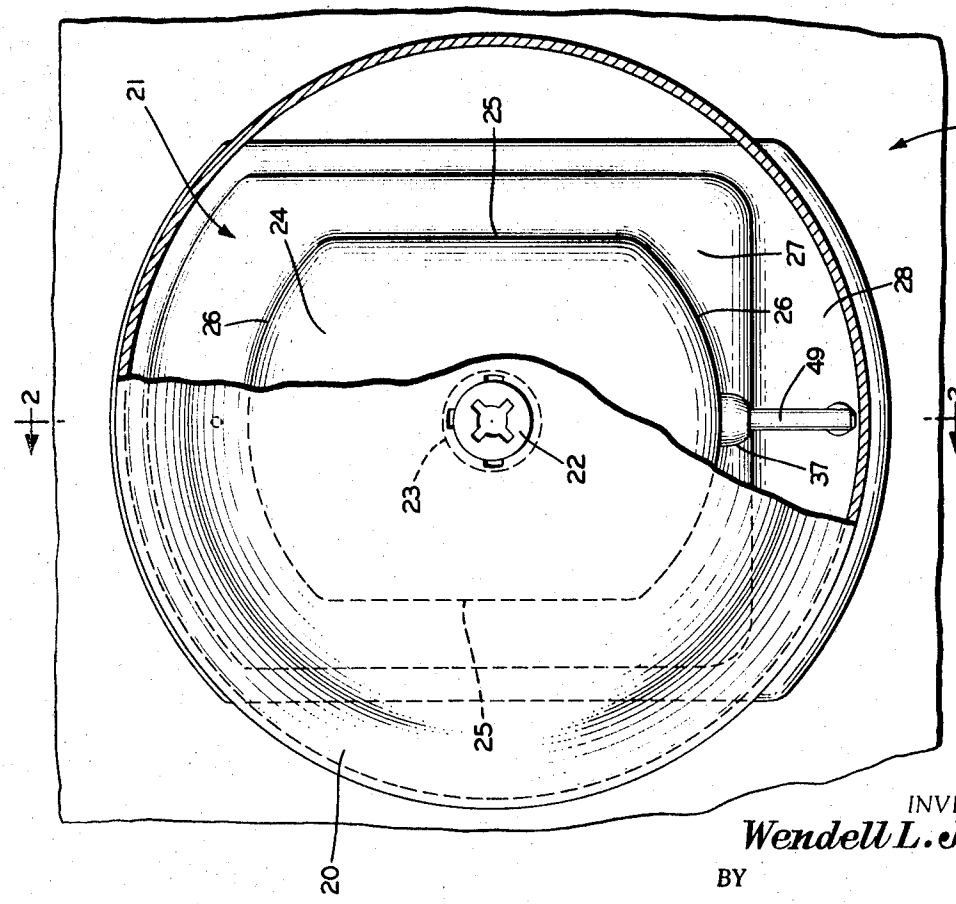

Fig. 1

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ELECTRIC BELL CONSTRUCTION

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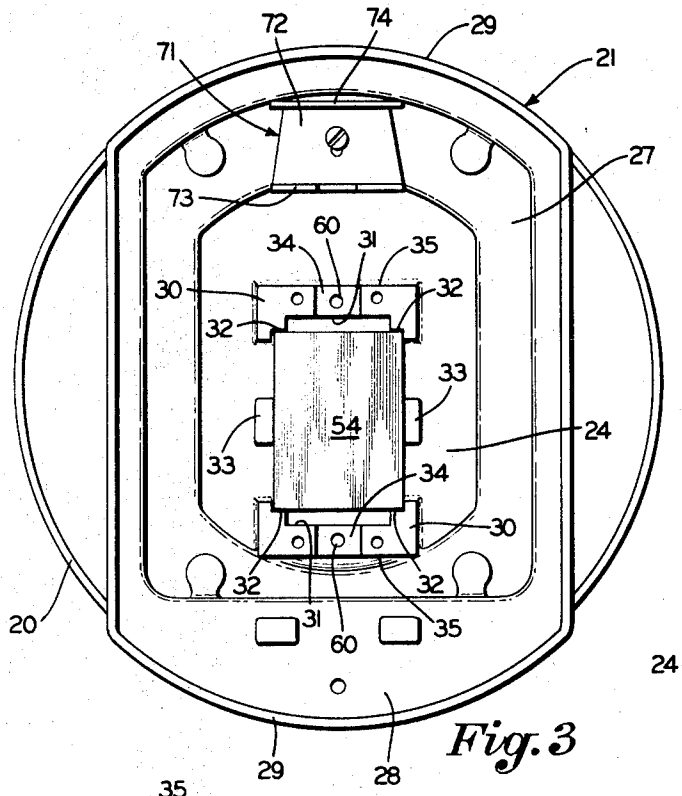

Fig. 3

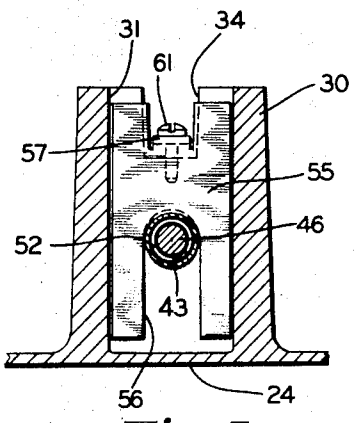

Fig. 5

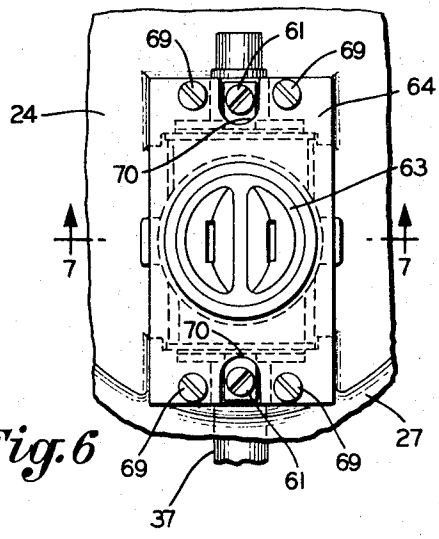

Fig. 6

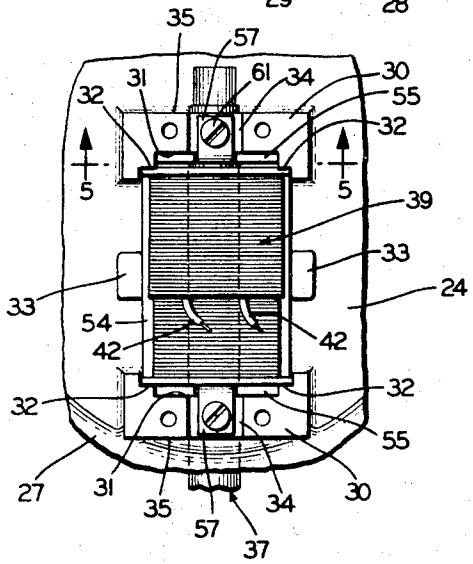

Fig. 4

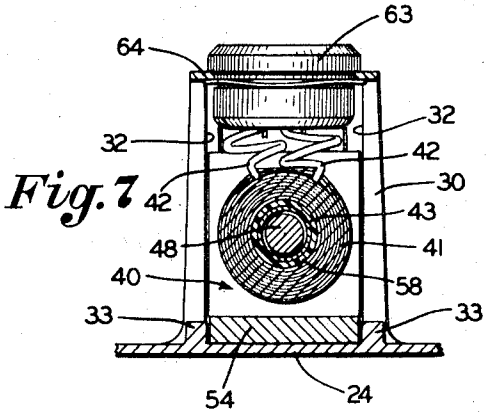

Fig. 7

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ELECTRIC BELL CONSTRUCTION

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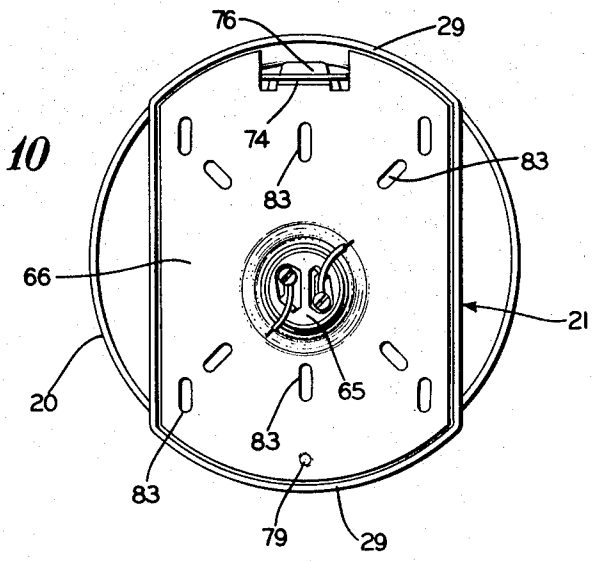
Fig. 10



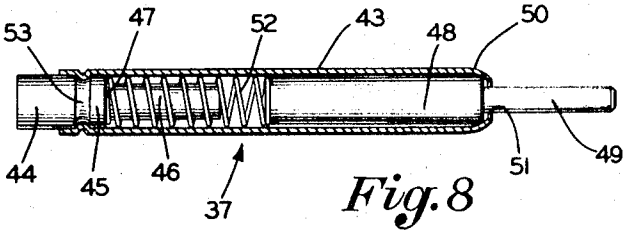


Fig. 8

Fig. 9

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United States Patent Office 3,550,118 Patented Dec. 22, 1970

3,550,118

ELECTRIC BELL CONSTRUCTION

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Int. Cl. G08b 3/00
U.S. Cl. 340—396 11 Claims

ABSTRACT OF THE DISCLOSURE

Electric bell construction having a bell housing, a motor structure and striker mounted within the housing, a gong shell mounted on the housing for engagement by the striker tip, and means for supplying electric power to operate the striker. The housing includes a pair of integrally formed upstanding post members, the post members including grooves for receiving a magnet, a coil bobbin, and clamp means which are attatched to the posts for retaining the coil, striker and magnet in place in the housing.

This invention relates to electric bells, and more particularly the invention relates to an improved housing and striker and motor assembly mounting construction for an electric bell designed to operate in response to alternating current.

Electric bell constructions are of two general types, one type being designed to operate in response to alternating current, and the other type being designed to operate in response to direct current. Alternating current type bells, usually called AC bells, normally include a bell housing having a cavity which contains a motor structure. A gong shell, generally cup-shaped, is normally mounted on the exterior of the housing, and a striker, mounted in the housing, is located in a position to strike the periphery of the gong shell to create the ring.

The motor structure of these electric bells includes, generally speaking, a coil, a magnet, and a ferrous material moving member, a part of the striker, which vibrates in response to current passing through the coil. Such motor structures do not necessarily need to include a magnet, but magnets are commonly used to aid the magnetic field established by current passing through the coil. The ferrous moving member will be attracted first in one direction and then in the other because of the continuously changing magnetic field established because of the continuously changing current direction alternation.

Prior AC bell constructions have incorporated a multiplicity of parts for mounting the magnet and the coil within the bell housing. Such parts have included a base assembly formed from stamped sheet metal, a pair of stamped sheet metal pole pieces, members to retain and hold the magnet in place, and mounting members for the striker assembly.

Such electric bell constructions have been extremely difficult to assemble in the past, primarily because of the multiplicity of parts concerned. Further, since a magnet is normally incorporated in AC bell constructions and because most of the mounting members are constructed of iron or steel, the assembly problem is more difficult since the magnet will tend to attract the iron and steel parts. It should, therefore, be obvious that holding the iron and steel parts in position for proper assembly is difficult because of the tendency of the magnet to pull these various parts away from the intended assembled position.

Other problems and disadvantages are associated with this type of construction. For example, because of the large number of parts involved, it is necessary to provide the tooling necessary to produce such parts, each of which is different from the other. Furthermore, many bell

constructions require left-hand and right-hand parts which thereby add to the tooling requirements.

A still further disadvantage is inherent in such constructions because screws are normally used for assembly, with a large number required. These bells are by their nature relatively small in size and the screws are correspondingly small. However, the operating bell assembly is subjected to substantial vibration caused by the vibrating striker assembly. Thus, with a large number of parts, all of which are screwed together, it can be seen that the bell motor assembly may tend to become very loose and ultimately come apart rather rapidly, even though lock washers may be used.

These problems are compounded when considering the fact that most bell manufacturers in addition to manufacturing AC bells also manufacture DC bells. Therefore, a complete new set of parts is necessary for the DC bells, as the large number of parts involved with the AC bells is normally not suited for use in DC bell constructions.

It is, therefore, a primary object of the present invention to provide an electric bell construction which is manufactured from considerably fewer parts than those known in the prior art. Other objectives of the invention include the provision of a unitary die cast housing assembly which has provisions for mounting a magnet, the coil, the striker assembly of the usual AC bell construction; the provision of integral features for mounting the electrical equipment necessary to operate the bell; the provision of unique mounting means for attaching the bell construction to the desired use location; the provision of parts for assembling the bell construction which may be used for both an AC bell and a DC bell, and the provision of an electric bell construction which can be manufactured and assembled with relatively simple assembly procedures.

These and other objects are accomplished by the parts, construction, arrangements, and combinations comprising the present invention, preferred embodiments of which—illustrative of the best mode in which applicant has contemplated applying the principles—are set forth in the following description and illustrated in the accompanying drawings, and which are particularly and distinctly pointed out and set forth in the appended claims forming a part hereof.

In general terms, the electric bell construction of the present invention includes a bell housing, a motor structure and striker assembly mounted within the housing, a gong shell mounted on the housing exterior with its periphery located adjacent to the striker tip, support plate means for enclosing the housing, and a male and female electrical plug assembly for supplying electric power to the coil to operate the striker. The housing of the bell construction of the present invention includes a pair of upstanding post-like members extending rearwardly from the front wall of the housing. The upstanding posts together with a pair of boss-like members provide a cavity means for receiving a magnet. The upright post members also include grooves for receiving a bobbin upon which the motor structure coil is wound. A pair of generally U-shaped clamping members is also provided to retain the striker and coil and magnet within the housing.

By way of example, the embodiments of the improved electric bell construction of the present invention are illustrated in the accompanying drawings forming a part hereof, in which similar numerals indicate similar parts throughout the various figures, and in which:

FIG. 1 is a fragmentary front elevation of an electric bell construction of the present invention, with a portion of the bell gong shell broken away;

FIG. 2 is a vertical cross section with the coil and

striker assembly in elevation of the electric bell of FIG. 1 taken along the lines 2—2 in FIG. 1;

FIG. 3 is a rear elevation of a bell housing showing the magnet cavity and the upstanding posts which comprise portions of the present invention;

FIG. 4 is a fragmentary rear elevation, similar to FIG. 3, with the coil striker and clamping members assembled in place;

FIG. 5 is a cross section through the housing posts and taken along the lines 5—5 in FIG. 4;

FIG. 6 is a fragmentary rear elevation similar to FIGS. 3 and 4 but showing the female electrical plug mounted on the housing posts;

FIG. 7 is a vertical cross section with the female plug in elevation taken along the lines 7—7 FIG. 6;

FIG. 8 is a cross section, partly in elevation, showing the striker assembly of the electric bell of the present invention;

FIG. 9 is an exploded perspective view showing the various parts and their relationship in the assembled condition; and

FIG. 10 is a rear elevation of the electric bell construction of the present invention showing the rear mounting plate and the male electric plug assembly.

Referring specifically to the drawings, the electric bell construction of the present invention includes a gong shell **20** which is generally cup-shaped in configuration and is very similar to the normal gong shell used in the prior art. Gong shell **20** is mounted on a housing generally indicated by reference numeral **21**, by a screw or bolt **22** which may be threadably engaged in a pedestal **23** that is an integral part of housing **21**. Housing **21** includes a front wall portion **24**, first opposite side walls **25**, curved end walls **26**, an intermediate wall **27**, and a mounting flange portion **28** which extends outwardly and may include a rearwardly extending portion **29**, that may extend around the periphery of the housing. Front wall **24**, side walls and end walls **25** and **26**, intermediate wall **27** and mounting flange portion **28** define a cavity in which the motor structure and striker assembly of the electric bell construction of the present invention may be mounted.

The housing of the present invention also includes a pair of upstanding rearwardly extending post members **30**. Post members **30** extend from front wall **24** in a direction toward the rear mounting flange **28**, and are each provided with a deep groove **31** and a pair of shallower grooves **32**. A pair of boss-like members **33** are also formed as a part of front wall **24** and are located in a position opposite from one another and aligned with the shallower grooves **32**. The two pairs of grooves **32**, and the pair of bosses **33** define a cavity for the receipt of a magnet, to be discussed more in detail below.

A notch or slot **34** is formed in the outer or rear face **35** of the posts **30** and extends inwardly toward front wall **24**. Post members **30** each have a hole **36** formed therethrough which is adapted to receive the striker assembly, generally indicated at **37**, which forms a part of the electric bell construction of the present invention.

The motor structure of the electric bell of the present invention includes a magnet **54**, a coil generally indicated by **39** which includes a bobbin **40** and windings **41**. A pair of lead-in wires **42** are connected to each end of windings **41** to supply current to the coil assembly **39**.

Referring specifically to FIG. 8, striker **37** includes an outer tubular member **43**, a core member **44** having a larger diameter portion **45**, and a smaller diameter portion **46** which extends within the interior of tubular member **43**. A shoulder **47** is defined by the juncture between the larger diameter portion **45** and smaller diameter portion **46**. The striker also includes a striker body **48** which has a striker tip **49** attached thereto. Striker body **48** is formed of a ferrous or other paramagnetic material while striker tip **49** is formed of some non-magnetic material such as brass. The outer diameter of body member **48** is slightly smaller than the internal diameter of tubular member **43** and is freely slidable therein. However, the end **50** of striker tube **43** is belled inwardly to confine the striker body within the interior of the tube while providing a hole **51** through which striker tip **49** projects. The striker tube also includes a spring member **52** which is supported at one end on shoulder **47** and at the other end by the end of striker body member **48**. Core member **44** of the striker is provided with a groove around larger diameter portion **45** and is inserted in the end of the striker opposite bell end **50**. A portion of the tube **43** may be collapsed to seat in grove **53**. This construction will firmly lock core member **44** in the striker tube **43**.

In general terms, the operation of the striker is generally as follows. The ferrous or paramagnetic striker body **48** is located within the continuously alternating magnetic field which is set up by the alternating current. For a portion of the current period the magnetic field will tend to attract the body **48** toward core member **44** and tend to compress spring **52**. As the current changes in direction, the magnetic field will also change in direction and attract the body **48** in the opposite direction. Movement of the body **48** will be additionally aided by spring **52**. At a given position of travel the striker tip **49** which is carried by body **48** will strike the periphery of the gong shell to impart the ring. The alternating current and resulting alternating magnetic field will cause the striker body **48** to vibrate back and forth inside the tube **43** and thereby continuously strike the gong shell to establish the continuous ring so long as current is applied to the coil.

The motor assembly of the present invention includes in addition to coil **39**, a magnet **54** and a pair of pole pieces **55**. Magnet **54** has a rectangular shape and slips, as seen in FIG. 3, in the four grooves **32** and extends between bosses **33** and post members **30**. Thus, the length of magnet **54** is approximately equal to the distance between one groove **32** on one pole piece and the opposite groove **32** on the opposite pole piece. Also, the width of magnet **54** is approximately equal to the distance between one of the pair of grooves **32** on each post **30**.

Pole pieces **55** are generally rectangular in shape and have an extended longitudinal slot **56** formed extending from one end toward the central portion of the pole piece. A tab **57**, which is bent from a portion of the pole piece to a positon at right angles to the body portion, is provided at the pole piece end opposite slot **56**.

As mentioned above, the coil assembly **39** includes a bobbin **40** and windings **41**. Bobbin **40** includes a generally cylindrical tubular portion **58** and a pair of end portions **59** which are preferably either square or rectangular in shape. The width of the bobbin end portions **59** is approximately the same as the width of the magnet **54** and approximately equal to the distance between the pair of grooves **32** on each of the posts **30**. At least one of the sides of bobbin ends **59** extending between the two sides that are received in grooves **32** should be flat for purposes to be discussed more in detail below.

The assembled motor structure of the bell construction of the present invention can be seen with specific reference to FIGS. 2, 4, 5 and 9. Magnet **54** is placed in a position extending between the two posts **30** and between the two bosses **33** and adjacent to the front wall **24** of the housing. The assembled coil, including the bobbin and windings, is received in the grooves **32** with one of the edges of the ends **59** resting on or abutting one of the surfaces of the magnet. The striker assembly **37** extends through one of the hole **36** in one of the posts **30** through the cylindrical portion **58** of bobbin **40** and through the second hole **36** in the second post **30**, and projects outside the housing, with striker tip **49** located adjacent to gong shell **20**. Each of the pole pieces **55** are positioned in deep grooves **31** in posts **30**. Tab **57** which has a hole **62** formed therethrough will be positioned at a point within slot **34** in post **30**.

The width of slot **56** is approximately equal to the outer diameter of tubular portion **43** of striker assembly **37**. Thus, pole piece **55** is located in groove **31** with striker **37** located at a position in slot **56**, with the bottom of slot **56** abutting striker assembly **37**. Tab **57** of pole piece **55** is located a slight distance above the bottom of slot **34** **34**. A threaded hole **60** is formed in the bottom of slot **34** to receive a screw **61** which passes through hole **62** in tab **57**.

The procedure for assembling the motor structure bell construction of the present invention is generally as follows. A housing which has holes **36** and **60** preformed therein is provided and magnet **54** is placed in position by sliding the same to the bottom of posts **30**. A coil assembly **39** is placed in grooves **32** to the proper position, and striker assembly **37** is inserted through hole **36** in one of the posts through the tubular portion **58** of the coil assembly and through the second hole **36** in the other post **30**. Pole pieces **55** are then placed in position and screws **61** are placed through holes **62** and screwed into holes **60**. The bottom of slot **56** will bear upon striker assembly **37**, as seen in FIGS. 2 and 5, and screw **61** may be tightened to hold the striker assembly in firm position. In addition, the edges of bobbin ends **59** will bear against the magnet **54** to hold the same in place. Thus, pole pieces **55** bear on striker assembly **37** which in turn bears upon the bobbin **40** which bears upon magnet **54**. It can, therefore, be seen that the motor structure assembly is held together by the two screws **61** passing through pole piece tab **57**.

Pole pieces **55**, in addition to acting as retaining members for the motor structure assembly, form a part of the magnetic circuit of the motor structure of the present invention. In addition to the pole pieces, the magnetic circuit includes magnet **54** and coil **39**. Thus, the magnetic flux, beginning with the coil, passes through one pole piece, through the magnet to the other pole piece, and back to the coil. It can, therefore, be seen that magnet **54** aids or assists the magnetic field established by the alternating current passing through windings **41** of coil assembly **39**.

Alternating current may be supplied to the solenoid coil **39** by attaching lead-in wires **42** directly to power supply lines. However, it may be desired to provide the assembly with a built-in power supply plug. Such plug is shown in FIGS. 2, 6, 7 and 9. A female socket **63**, of the usual type, may be mounted in a hole in socket mounting plate **64**. Wires **42** which lead to the coil may be attached, one each, to each one of the sockets in socket assembly **63**. A male plug **65** mounnted on back mounting plate **66** and attached to supply lines **67** will, when the housing is mounted on the mounting plate as will be described below, provide power to the motor structure through the male prongs **68** which are inserted in the sockets of female assembly **63**.

As seen most clearly in FIG. 6, female socket mounting plate **64** is attached to the top of the pair of posts **30** by a series of screws **69**. Notches **70** may be formed in the ends of socket mounting plate **64** so that access can be had to screws **61** for adjustment of strike assembly **37**.

For maximum ringing quality and efficiency, the striker tip **49**, which strikes the periphery of gong shell **20**, should contact the gong shell at approximately the point of maximum velocity. After the bell has been assembled and the gong shell mounted, the bell construction may be tested by supplying power to the coil. The striker can then be adjusted for maximum ringing efficiency by loosening slightly the two screws **61**, and sliding the position of the striker, relative to the gong shell, either closer thereto or farther therefrom. The maximum amount of ring produced can be measured by any suitable or convenient method. After the most efficient position of the striker assembly has been located, screws **61** can be tightened again. Tightening of screws **61** will tend to force the pole pieces **55** toward the front wall **24** of the housing. Striker assembly **37** will be firmly retained in position, since the bottom of slot **56** will bear tightly against striker **37** retaining it in hole **36** in posts **30**. Similarly, this will hold coil assembly **39** and, therefore, magnet **54** firmly in position.

A further feature of the present invention involves mounting plate **66**, associated with the bracket **71** which is mounted on intermediate wall **27**. Mounting bracket **71** is generally U-shaped in cross section and includes a base portion **72**, first leg **73** and second leg **74**. Leg **74** has an elongated slot **75** formed therein to receive on offset tab **76** which extends first inwardly and then upwardly from mounting plate **66** toward the interior of housing **21**. A hole **77** is formed in the lower end of mounting plate **66** and a corresponding hole **78** is formed in the lower portion of mounting flange **28** of housing **21**. A screw **79** passes through hole **78** in the housing and is threadably engaged in hole **77** in the mounting plate.

In accordance with this aspect of the present invention, the top edge of U-leg **73** bears against mounting plate **66** and mounting plate **66** pivots about this point. This pivotal arrangement is established because the distance between the inside face **76***a* of tab **76** and the outside face **80** of mounting plate **66** is slightly less than the distance between the top of leg **73** and the upper edge of slot **75**. Thus, when the bell is mounted in the position shown in FIG. 2, tab **76** is flexed very slightly toward the inside of the bell housing and mounting plate **66** is flexed slightly inwardly at its lower end toward the interior of bell housing **21** and will be under slight tension.

This construction serves a two-fold purpose. First, it enables the mounting of the bell assembly on the mounting plate **66**, which may have previously been mounted on a wall **81** by screws **82** passing through holes **83**, by using the single screw **79**. Secondly, it enables the bell housing **21** to be firmly and securely mounted at the desired location while only using one screw and yet while mounted in a stressed condition to absorb vibration to which the housing will naturally be subjected from striker operation.

One important feature of the electric bell construction of the present invention is that the housing **20** and posts **30** are formed as an integral unit. This construction can be accomplished by any form of casting or other means. However, it is preferable to die-cast the housing with its integral upstanding posts **30**. The provision of the integral upstanding posts **30** eliminates a substantial number of parts which were previously required in prior art constructions.

Another important aspect of the present invention is that the unique construction of the posts with the integrally formed grooves **32** and bosses **33** provide a cavity in which magnet **54** may be placed by itself, without the provision of complicated clamping and retaining means. This construction also permits the magnetization of magnet **54** after assembly of the motor structure in the bell housing. While it is not necessary to magnetize magnet **54** after assembly it is preferrable to follow this procedure since it eliminates any problems that might arise during assembly particularly if a cast steel or cast iron housing is used.

Another important aspect of the present invention is that the entire bell motor assembly is held together with two screws. That is, screws **61**, of which only two are necessary, hold together the entire motor structure including striker, magnet and coil. For mounting the completed bell assembly on a wall, a single screw **79** is necessary. Thus, it can be readily seen that the procedures for assembling the bell of the present invention are extermely simple and do not require complicated jigs or fixtures and can be accomplished in a relatively short period of time. This enables a great savings in both labor and parts and materials.

A further important feature of the bell construction of

the present invention is the provision of the lateral adjustment of the striker assembly. This adjustment is possible after completion of the bell. As indicated above, screws **61** may be loosened and striker assembly **37** can be moved laterally in hole **36** and through the interior portion of the coil to adjust its position in relation to the gong shell. This is not only important when considering that the striker needs to be adjusted for maximum ringing efficiency during intial construction, but also permits the adjustment of the striker for routine maintenance after the bell has been mounted at its ultimate location.

A still further important aspect of the present invention involves the relationship between the mounting bracket **71**, mounting plate **66** and the female and male plug assemblies, the male portion of which is mounted to mounting plate **66** and the female portion of which is mounted on the bell housing posts **30**. This construction permits premounting the mounting plate **66** at the desired location in a wall and provides a connection between the male plug **65** to an alternating current power supply. The bell housing may be mounted by positioning tabs **76** in slot **75** and fastening screw **79** to hole **77**. The prongs **68** of male plug **65** will automatically engage the socket in female assembly **63**. Thus, when assembled on the mounting plate **66**, the motor structure is automatically connected to a power supply. Conversely, when the bell housing is removed from mounting plate **66**, power is automatically disconnected from the motor structure and work on the motor structure can be done without power and without having to loosen wires from terminals.

A still further important feature of the bell mounting construction of the present invention is that by using the unique mounting plate assembly **66** and mounting bracket **71**, it is possible to eliminate a hole which has been commonly used in prior art constructions. Such a hole or slot has been normally provided in prior art housings for mounting the housing and is an easy access for rain and other weather elements. This objectionable hole is, thus, eliminated from the housing by the provision of the unique mounting plate and bracket assembly.

It should be understood that certain of the elements comprising the present invention can be changed without departing from the scope of the invention. For example, the position of female socket assembly **63** and male socket assembly **65** could be reversed. That is, the male assembly **65** could be mounted on socket mounting plate **64**, and the female socket could be mounted on mounting plate **66**. Similarly, the exact shape of posts **30** can be varied without departing from the scope of the present invention as well as the exact shape of pole pieces **55** can be varied without departing from the scope of the present invention. Various changes could also be made to the striker and coil while still embodying the principles of the present invention.

The most important aspect of the present invention is the provision of a combination of elements, each of which coacts together with other elements of the bell construction to provide a bell which can be manufactured and assembled with a minimum number of parts, and without the necessity of providing a complicated set of mounting brackets and the like. Not only are manufacturing costs kept at a minimum, but assembly costs and other related cost factors will be substantially reduced because of the provision of the unique construction of the present invention.

In the foregoing description, certain terms have been used for brevity, clearness and understanding but no unnecessary limitations are to be implied therefrom, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiments of the improved constructions illustrated and described herein are by way of example and the scope of the present invention is not limited to the exact details of construction shown.

I claim:

1. Electric bell construction including a housing having a front wall, side walls extending from the front wall to form a housing cavity, and means for mounting the bell at a desired location; a gong shell mounted on the housing; a motor structure including striker means, coil means, magnet means, and mounting means located within the housing cavity, means positioning the striker to strike the gong shell, post means formed integrally with the housing and extending from the front wall to the interior of the housing cavity, said mounting means engaging the striker means for mounting the motor structure on the post means, means for supplying power to the coil to operate the striker, said post means including a first and a second post extending from the front wall of the housing into the housing cavity, said mounting means including a pair of pole pieces having slot means and tab means, said mounting means engaging the striker means at the bottom of the slot means and said mounting means being attached to the post means by the tab means.

2. Electric bell construction as defined in claim **1** in which said magnet means is positioned adjacent the housing front wall and extends between the posts and said mounting means retaining said magnet means, coil means, and striker means in place.

3. Electric bell construction including a housing having a front wall, side walls extending from the front wall to form a housing cavity, and means for mounting the bell at a desired location; a gong shell mounted on the housing; a motor structure including striker means, coil means, magnet means, and mounting means located within the housing cavity, means positioning the striker to strike the gong shell, post means formed integrally with the housing and extending from the front wall to the interior of the housing cavity, said mounting means engaging the striker means for mounting the motor structure on the post means, means for supplying power to the coil to operate the striker, post means including a pair of posts extending from the front wall to the interior of the housing, each of the post means having a hole formed therethrough, one of said holes communicating between the interior and exterior of the housing, said striker means being mounted within said holes and extending outside of the housing to a position operable to strike the gong shell, said coil means engaging the magnet means, said mounting means being secured to the posts and engaging the striker means to retain the striker means, coil means and magnet means in place within the housing.

4. Electric bell construction including a housing having a front wall and side walls extending from the front wall forming a housing cavity, a gong shell mounted on the housing, a motor structure including striker means, coil means, and mounting means located within the housing cavity, first and second post means formed integrally with the housing and extending from the housing front wall longitudinally into the cavity, each of the post means having a hole formed therethrough, the second post means hole communicating between the interior and the exterior of the housing, said striker means extending through said holes and outside of the housing to a position adjacent and operable to strike the going shell, said coil means engaging and surrounding the striker means, and said mounting means being secured to the post means and adjustably engaging the striker means retaining the striker in adjusted position and the coil means in place within the housing.

5. Electric bell construction as defined in claim **4** including magnet means, said coil means engaging the magnet means, there being a space in said cavity formed between the coil, the front wall of the housing, and the post means, and said magnet means being located in said space.

6. Electric bell construction as defined in claim **4** in which each of said post means is formed with first groove

means extending longitudinally of the post and second groove means extending longitudinally of the post adjacent the first groove means, the first and second groove means on one post being formed facing and complementary to the first and second groove means of the other post, and the mounting means secured to the post means and engaging and retaining the striker means being located and engaged in the first groove means of each post.

7. Electric bell construction as defined in claim **6** in which the coil means extends between the first and second post means and is seated in the second groove means in each of said post means.

8. Electric bell construction as defined in claim **7** in which magnet means is mounted in the second groove means and extends between the post means and is located between the coil means and the front wall of the housing.

9. Electrical bell construction as defined in claim **4** in which said mounting means includes a plate having a slot formed therein and an ear, said mounting plate slot engaging the striker means, and means securing the ear to the post.

10. Electric bell construction as defined in claim **9** in which the ear is provided with a hole, in which said securing means includes screw means extending through said hole and engaging the post, and clamping the striker means to the post means.

11. Electric bell construction including a housing having a front wall and side walls extending from the front wall forming a housing cavity, a gong shell mounted on the housing, a motor structure including striker means, coil means and mounting means located within the housing cavity, first and second post means mounted in the housing and extending from the front housing front wall longitudinally into the cavity, each of the post means having a hole formed therethrough, the second hole communicating between the interior and the exterior of the housing, said striker means extending through said holes and outside of the housing to a position adjacent and operable to strike the gong shell, said coil means engaging and surrounding the striker means, said post means having first and second groove means extending longitudinally of the post, the first and second groove means on one post being formed facing and complementary to the first and second groove means in other post, and the mounting means secured to the post means and engaging and retaining the striker means, and being located within the first groove means of each post.

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