July 13, 1965 C. E. SLOOP 3,195,099

TERMINAL FOR A METER SOCKET

Filed July 17, 1961 2 Sheets-Sheet 1

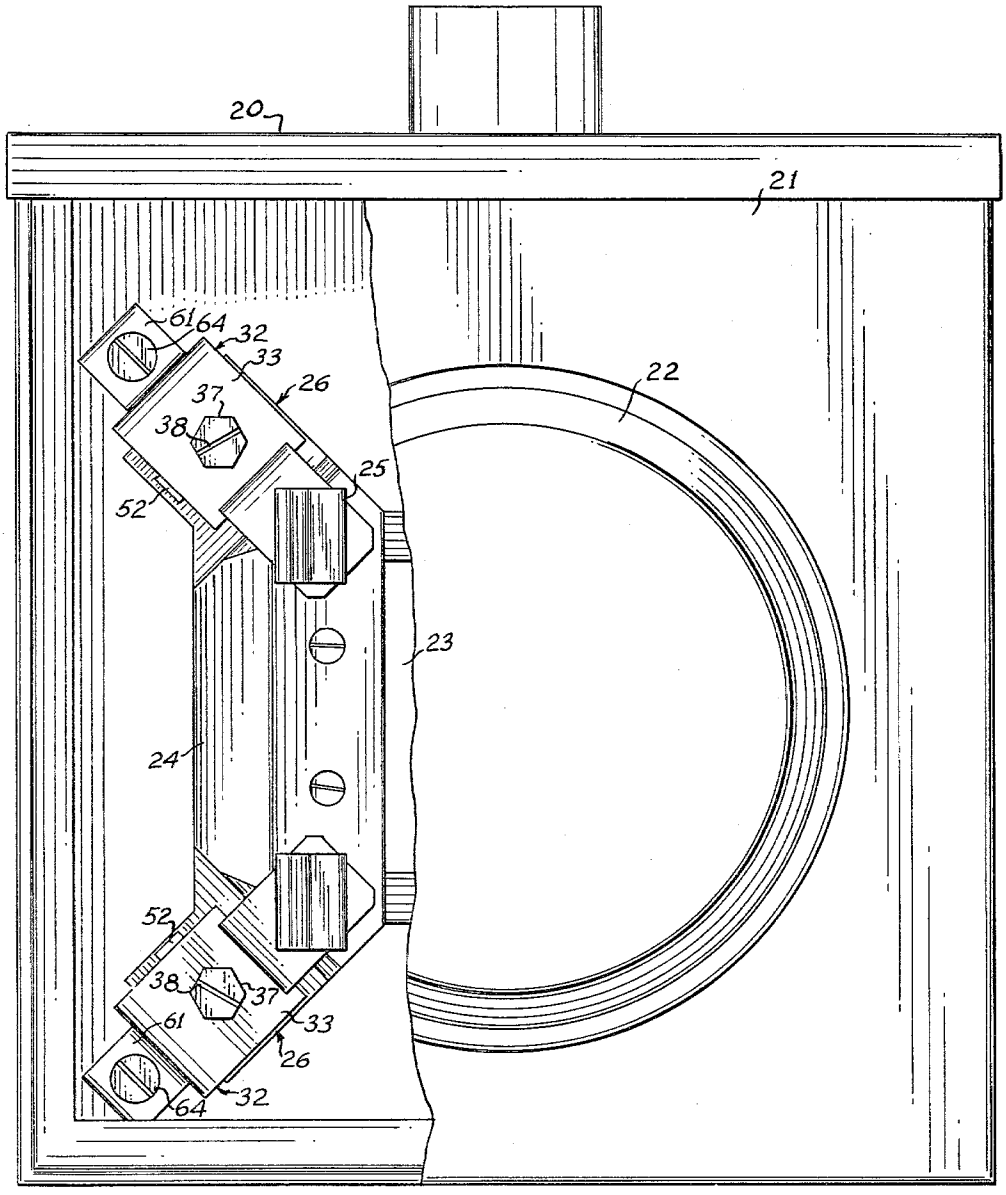


Fig. 1

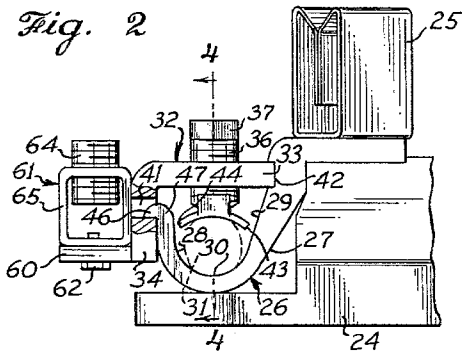
INVENTOR.
Clifford E. Sloop
BY
ATTORNEY

July 13, 1965 C. E. SLOOP 3,195,099

TERMINAL FOR A METER SOCKET

Filed July 17, 1961 2 Sheets-Sheet 2

Fig. 2



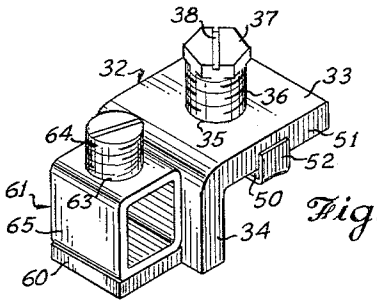


Fig. 3

Fig. 4

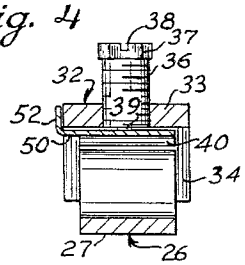
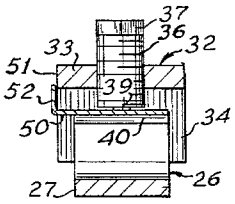


Fig. 5



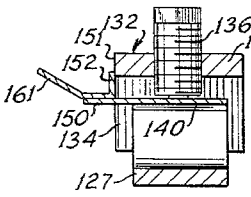


Fig. 6

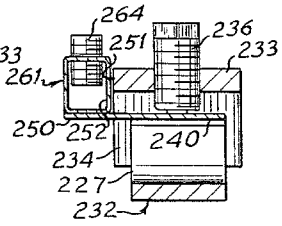


Fig. 7

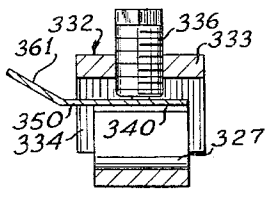


Fig. 8

Fig. 9

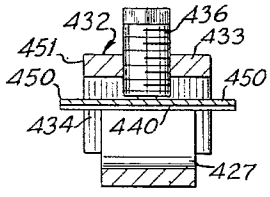
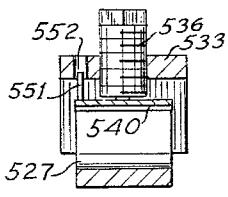


Fig. 10



INVENTOR.
Clifford E. Sloop
BY
ATTORNEY

United States Patent Office 3,195,099 Patented July 13, 1965

3,195,099

TERMINAL FOR A METER SOCKET

Clifford E. Sloop, 2230 10th St., Columbus, Ga.

Filed July 17, 1961, Ser. No. 124,730
8 Claims. (Cl. 339—113)

This invention relates to a terminal for a meter socket and is more particularly concerned with a cap for the terminal of a meter socket.

In the past, both U-shaped terminals and V-shaped terminals have been devised. The U-shaped terminal has a cradle or lower jaw with parallel side walls and a concaved lower portion which has a greater radius than the radius of the conductor which it receives. The conductor is urged against the lower part of the concave portion of the cradle by means of a foot carried by the end of a set screw. The set screw, in turn, is carried by a bracket, the bracket, set screw and foot forming the cap of the terminal. Since the side walls are esesntially parallel in the U-shaped terminal, there is little danger of the foot becoming canted or misaligned with the side walls.

The V-shaped terminal which resulted from the requirement for additional area contacting the end of the conductor, when the terminals are manufactured of say aluminum rather than copper, has a smaller concaved bottom portion and converging walls which merge with the bottom portion. The V-shaped terminal has essentially the same foot, set screw and bracket as the U-shaped terminal; however, because of the converging inner walls of the V-shaped terminal, the foot of this type terminal very often becomes twisted or canted. In other words, the pressure foot may be in many radial positions, other than proper alignment, when the cap is installed, or may become misaligned as the set screw is tightened whereby one end of the pressure foot extends over the short or out end of the cradle or lower jaw of the terminal.

The electrician cannot readily determine that the foot of the V-shaped terminal has become twisted or canted since the bracket of the cap normally hides the foot from the electrician. Thus, the electrician, tightening the set screw sufficiently for the inner end of the foot to contact the conductor, does not realize that the foot is not applying sufficient pressure to the terminal to assure adequate current transfer. In many instances, it is also impossible to feel beneath the bracket and determine whether proper contact has been made by the pressure foot. With insufficient pressure being applied by the jaws of the terminal, i.e. the cradle and the pressure foot, to the conductor, it is apparent that this junction has insufficient capacity whereby a substantial voltage drop occurs between the conductor and the terminal, thereby resulting in the generation of heat at the terminal and perhaps some arcing. Both the generation of heat and the arcing are dangerous and may cause a fire hazard. In addition, both heat and arcing may cause severe damage to the terminal and the remaining portion of the meter socket. Further, in some instances the meter itself may become damaged. If failure resulting from improper seating of the pressure foot does not occur within the first few days of use with the continued generation of heat, failure will probably occur after the meter socket has been in use for one or two years. In many instances, before the trouble is discovered, the wires or conductors have become annealed to such an extent that they must be withdrawn from service and the terminals have been burned sufficiently that they must be replaced. Thus, service must be interrupted and costly replacements made.

It is to be noted that in a single phase meter box there are six terminals and in a three phase meter box there are eight terminals, any one of which if defectively

connected to its conductor will cause the trouble described above.

When a meter is removed from an installed meter socket, it is often desirable to provide a secondary circuit to conduct the electricity from the line to the installation. This secondary circuit requires additional clamps which may or may not be provided with the initial installation of the meter socket. Conventionally, these additional clamps take the form of permanently secured terminals attached to the block. Thus, if such clamps are required and are not present in the meter socket, it is necessary to install new terminals or in some instances an entire new block which carries the terminals. Such an arrangement is expensive and requires considerable time.

Briefly, the present invention, which overcomes the disadvantages described above, includes a cap for the terminal of the meter socket. This cap or upper jaw includes the usual mounting bracket which fits on or over the outer portion of the cradle or lower or inner jaw of the terminal. A threaded set screw threadedly protrudes through the bracket and a swivelly mounted foot on the end of the set screw urges the conductor against the concaved portion of the cradle of the V-shaped terminal. According to the present invention, a guide is provided between the foot and the bracket so that the foot is maintained in axial alignment with the bracket at all times and may be freely and readily moved toward and away from the concaved portion of the cradle without danger of the foot becoming canted or twisted within the cradle. In addition, the guide, in some embodiments of the present invention, provides a visual means by which the position of the foot may be ascertained by the electrician. In some embodiments a secondary terminal such as a clamp or spade is carried by the bracket or foot whereby a secondary circuit may readily be installed if desired.

Accordingly, it is an object of the present invention to provide a cap for a terminal of a meter socket which is inexpensive to manufacture, durable in construction and efficient in operation.

Another object of the present invention is to provide a cap for the terminal of a meter socket, which cap will insure the proper seating of its pressure foot against the conductor received by the terminal.

Another object of the present invention is to provide a cap for the terminal of a meter socket, which cap will provide a visual indication of the position of the foot of the cap.

Another object of the present invention is to provide a cap for the terminal of a meter socket having a conductor clamp, the cap being readily installed and removed from a conventional cradle of the terminal of a meter socket.

Another object of the present invention is to provide a cap which is adapted to be connected to the conductor within a terminal, the cap having adequate capacity to conduct current to or from a secondary circuit and a convenient means by which such circuit is established.

Other objects, features and advantages of the present invention will become apparent from the following description when taken in conjunction with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

FIG. 1 is a front elevational view of a meter box and meter, the cover of the meter box being partially broken away to show the meter socket and the terminals thereof receiving the caps constructed in accordance with the present invention.

FIG. 2 is a partially broken, side elevational view of one of the terminals of the meter box illustrated in FIG. 1.

FIG. 3 is a perspective view of a cap constructed in accordance with the present invention.

FIG. 4 is a cross sectional view taken along line 4—4 in FIG. 2.

FIG. 5 is a cross sectional view similar to FIG. 4 and showing the pressure foot in its lowered position.

FIG. 6 is a cross-sectional view similar to FIG. 5 and illustrating a modified form of the present invention.

FIG. 7 is a view similar to FIGS. 5 and 6 and illustrating another modification of the present invention.

FIG. 8 is a view similar to FIGS. 5, 6 and 7 and illustrating still another modification of the present invention.

FIG. 9 is a cross sectional view similar to FIGS. 5, 6, 7 and 8 and illustrating still another modification of the present invention.

FIG. 10 is a view similar to FIGS. 5, 6, 7, 8 and 9 and illustrating still another modified form of the present invention.

Referring now in detail to the embodiments chosen for the purpose of illustrating the present invention, it being understood that in its broader aspects the present invention is not limited to the exact details herein depicted, numeral **20** denotes generally a meter box having a cover **21** and receiving a meter **22**. This conventional meter box **20** contains, mounted to the back wall **23** thereof, the usual meter socket which includes a terminal block **24** carrying the usual spade receiving jaws **25** mounted in electrical contact with the terminals, denoted generally by numeral **26** for receiving the spades or blades (not shown) of the meter **22**.

Each terminal **26** includes a V-shaped cradle or lower or inner jaw **27** having converging inwardly and downwardly protruding side walls **28** and **29** which merge with the concaved bottom surface **30** of the cradle. The cradle **27** is thereby adapted to receive the end of a wire, cable or conductor **31**, as illustrated in FIG. 2, the conductor **31** being shown in broken lines.

The cap of each terminal includes an L-shaped bracket or jaw **32** having a set screw carrying plate **33** and an inwardly protruding plate **34** essentially perpendicular to each other and integrally joined along a common edge. The central portion of the set screw carrying plate **33** is provided with an internally threaded hole **35** which threadedly receives a set screw **36**, the set screw **36** being provided with external threads which engage the internal threads of hole **35**. The set screw **36** has a head **37** which may be hexagonal and/or may contain a kerf **38** by means of which the screw **36** is adjusted within the hole **35**.

At the inner end of screw **36** is a pin **39**, the lower end of which pivotally or swivelly receives a rectangular, downwardly curved pressure foot **40**. The length of foot **40** is less than the length of plate **33** and the width of foot **40** is less than the width of plate **33** so that foot **40** is essentially hidden by plate **33** when the cap is installed. The set screw **36** is free to pivot while the foot **40** remains facing the same direction and is therefore either raised or lowered by the rotation of screw **36**.

The plate **34** has a relatively wide central slot **41** for receiving the outer lip **46** of the terminal cradle **27**, as the inner edge of the plate **33** is received within a transverse slot **42** of the cradle **27**, the upper end **47** of the outer portion of cradle **27** terminating below slot **41** so that the foot **40** may clear the cradle as the cap is installed.

The elements thus far described are essentially conventional. According to the present invention, a guide member is provided on or connected to the foot **40** for cooperation with the bracket **32** so as to maintain the foot **40** in its normal position during at least the first period of the downward movement of the foot **40** toward the concaved surface **30**. The guide member is sufficiently long that the opposite edges **43** and **44** of the rectangular concaved foot are within the confines of

the walls **28** and **29** of the cradle **27**, before the guide member clears the bracket **32**.

As will be seen in FIGS. 1, 2, 3, 4 and 5, the guide member in this particular embodiment includes a guide finger having a laterally extending base **50** which is approximately parallel to the lower surface of plate **33**, the base **50** protruding beyond the side **51** of plate **33** and terminating in an upstanding or outwardly extending guide plate **52** which is essentially perpendicular to base **50** and extends parallel to and outwardly adjacent the side **51**. The guide plate **52** is about the width of the thickness of plate **33** and is greater in length than the axial distance between edges **44** and the end **47**, when the foot **40** is in its most retracted position as illustrated in FIG. 4. Therefore, until the foot **40** has been moved inwardly or downwardly by a distance sufficient to position the edges **43** and **44** within and adjacent the side walls **28** and **29**, at least a portion of the guide plate **52** remains within the plane of the plate **33**. Thus, the foot **40** is guided throughout its inward travel, the foot **40** being guided by guide plate **52** during the first portion of its inward travel and being guided by the sides **28** and **29** during the latter part of its inward travel.

As seen in FIGS. 1, 2 and 3, the plate **34** is provided at its innermost end with a mounting base **60**, the mounting base **60** extending outwardly of plate **34**, essentially parallel to and spaced inwardly from the plate **33**. The base **60** also extends in an opposite direction from the direction in which the plate **33** extends. Preferably, the base **60** is smaller than the plates **33** or **34** but is sufficiently large to receive a take-off terminal or clamp denoted generally by numeral **61**. In the present embodiment, the take-off terminal **61** includes a hollow, rectangular tubular member **65** which is secured by means of brad **62** to base **60**. The upper side of clamp **61** is provided with a hole **63** for receiving the set screw **64** which is adapted to clamp a piece of wire within the hollow tubular member **65** of the clamp **61**. The sides of the member **65** extend essentially parallel to the plate **34** while the upper surface of the clamp **61** is essentially parallel to the upper surface of plate **33**.

In the embodiment of FIG. 6, the cap includes the conventional bracket **132** having plates **133** and **134**, similar to bracket **32** and its plates **33** and **34**, and the cradle **127** being similar to cradle **27**. The set screw **136** is similar to set screw **36**, while the foot **140** is similar to foot **40**. According to this embodiment, the base **150** protrudes laterally from the foot **140** and is provided with a flange member which includes an upstanding or outwardly protruding guide plate **152** which extends outwardly parallel to the side **151** of plate **133**. The plate **152** serves the same purpose as plate **52** of the previous embodiment. The flange also includes angularly extending contact plate or spade **161** which is adapted to receive a jaw terminal (not shown) of a secondary circuit, as will be understood by those skilled in the art.

In FIG. 7, the modification includes the cap having a bracket **232** with the plates **233** and **234** similar to plates **33** and **34**, the plate **233** receiving the set screw **236**. The set screw **236** is provided with pressure foot **240** which is adapted to cooperate with the cradle **227** in the manner in which the pressure foot **40** cooperates with the cradle **27**. According to the present modification, the base **250** protrudes laterally from the foot **240**, beyond the outer edge **251** of the plate **233**. This base **250** is provided with a tubular clamping member **261**, the clamping member **261** being rectangular in cross section and open at both ends, such as the tubular member or clamp **61**. The tubular member **261** is provided with a set screw **264** similar to set screw **64**. According to this modification, the inner surface of the inner side **252** of the tubular member **261** provides an upstanding flange or plate which rides adjacent the side **251** of plate **233** so as to provide a guide for the foot **240**.

In the embodiment shown in FIG. 8, the cap includes the bracket 332 which comprises the plates 333 and 334 similar to plates 33 and 34. The plate 333 receives the set screw 336, the set screw carrying at its lower end the pressure foot 340. The bracket 332 cooperates with the cradle 327 in the manner in which the bracket 32 cooperates with the cradle 37. According to the present modification, the base 350 protrudes from one end of the pressure foot 340, the base 350 extending parallel to, below and beyond the lower surface of plate 333. The end of base 350 is provided with outwardly protruding angularly disposed contact plate or spade 361 which has a use and function similar to the use and function of the contact plate 161.

In the embodiment illustrated in FIG. 9, the cap includes a bracket 432 having plates 433 and 434, similar to the bracket 32. The plate 433 carries the set screw 436, the set screw 436 carrying at its lower end the pressure foot 440 for cooperation with the cradle 427 in the manner in which the pressure foot 40 cooperates with cradle 27. In the present embodiment, the pressure foot 440 is provided at its opposite ends with bases 450 which protrude parallel to and below the plate 433, the bases 450 extending beyond the opposed sides 451 of plate 33, thereby providing extensions to the pressure foot 440, each base 450 being sufficiently long that the distance from the outer edge of each base 450 to the center of the pressure foot 440 is greater than the distance from the inner surface of plate 434 to the center of pressure foot 440. Under such conditions, it is impossible for the pressure foot 440 to rotate so as to arrange its end transversely or in engagement with the inner surface of plate 434.

In the embodiment illustrated in FIG. 10, the cap includes a bracket 532 having a plate 533 and a plate 534 similar to the plates 33 and 34 of the previous embodiment. The set screw 536 is carried by plate 533 and, in turn, carries the pressure foot 540 so as to cooperate with the cradle 527. In this embodiment, an upstanding pin 551 on the outer surface of a pressure foot 540 is adapted to register with or be received in a circular hole 552 in plate 533, the upstanding pin 551 being parallel to the axis of the set screw 536 and in alignment with the hole 552. By being received in the hole 552, the pin 551 acts as a guide to maintain the pressure foot 540 in alignment as the screw 536 is rotated for raising or lowering the pressure foot 540.

Operation

From the foregoing description, the operation of the present device should be apparent. When the meter box is installed on a wall, or otherwise installed, the cables, such as conduit or conductor 31, are led into the box 20 in the usual way so as to be received in the terminals 26, the end of the conductors, such as conductor 31, lying within the cradle 27 of each terminal 26, whereby an uninsulated portion of the conductor 31 protrudes on either side of the cradle 27. Thereafter, the cap is installed on cradle 27 so that the end of plate 33 is received in its groove 42 as the slot 41 receives the protruding lip 46 of the cradle 27. When the cap is being installed, the set screw 36 is in its retracted position so that the foot 40 is essentially against or adjacent to the lower surface of plate 33, as illustrated in FIGS. 3 and 4. The set screw 36 is then tightened so as to lower the pressure foot 40 against the top portion or top periphery of the exposed cable or conductor 31, thereby urging the lower periphery or lower portion of the conductor 31 against the lower concaved surface of the cradle 27.

As the foot 40 is lowered, it is guided in its movement downwardly by the plate 52 and the side 51 of the cap, plate 52 providing a visual indication of the position of foot 40. Thus, it is impossible for the foot 40 to become misaligned until the plate 52 clears the side 51. The plate 52, however, is sufficiently long that when it clears the side 51, the edges 43 and 44 of the foot are within

the confines of the converging sides 28 and 29 and hence the danger of misalignment of the foot 40 no longer exists.

In the embodiment of FIG. 6, the plate 152 serves the same purpose as plate 52 and hence no detailed description of the operation of this embodiment is required. Likewise, the side 251 of the embodiment shown in FIG. 7 serves the same function as the plate 52 and hence no detailed description of the operation of this embodiment is required.

With respect to the embodiments of FIGS. 8 and 9, it will be seen that the base 350 and the flange or spade 361 provide a visual indication of the position of the feet 340 and 440 and therefore the electrician will be capable of determining when the foot is properly aligned. Further, the base 350, the spade 361 and the bases 450 protrude sufficiently beyond the outer edges of the brackets 332 and 432 that no appreciable misalignment of the feet 340 and 440 will occur, the bases 350 and 450 engaging the side wall 29 at its outer edges or against the outer edges of plate 34 if any misalignment occurs.

With respect to the embodiment illustrated in FIG. 10, it will be seen that upon the rotation of set screw 536 the foot 540 is maintained in proper alignment by the pin 551 riding within the slot or hole 552. Thus, the pin 551 serves the same function as the plate 52 of the previous embodiment.

With respect to the secondary circuit clamps, such as clamp 61 and 261, if any circuit needs to be established from any of the terminals 26, a wire or conductor (not shown) is inserted within the hollow tubular member such as member 65 of the clamp 61 or 261 and the set screw 64 or 264 is thereafter tightened against the wire so as to hold it in position. In those prior art constructions which have conventional caps similar to the cap of the present invention, the cap of the present invention need only be substituted for the existing cap in order to establish a clamp for the secondary circuit. This may be easily and quickly accomplished, without appreciable cost. If a spade type secondary clamp is required, the embodiments of FIGS. 6 and 8 may be employed, whereby the spades 161 and 361 serve to receive jaws (not shown) of the secondary circuits.

It is therefore seen that with the particular construction here disclosed, the clamps 61, and 261 and the spades 161 and 361 have a dual path of supply for current. This dual supply is from the cradle 27 and from the properly positioned pressure foot, such as foot 40. The pressure foot 40, being in direct contact with conductor 31, supplies the clamp 61 with current via screw 36 and bracket 32. Usually small currents are involved in the secondary circuit and therefore the connection is sufficient.

The spades 161 and 361 are used primarily to provide convenient terminals for temporary connections.

The advantages of the device of FIG. 9 is that the bases 450 provide additional contacting area for the foot 540 while providing a visual indication of the position of the foot 540.

It will be obvious to those skilled in the art that many variations may be made in the embodiments here chosen for the purpose of illustrating the present invention without departing from the scope thereof as defined by the appended claims.

I claim:

1. In a meter socket including a box having enclosed sides, an enclosed back, and a removable cover to close the front of said box, a terminal block mounted on said back, and a plurality of terminals for receiving conductors, said terminals being of the class having a pair of jaws including a cradle with opposed, downwardly converging side walls and a concaved bottom surface merging with said side walls, and a removable cap forming an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and

threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, said foot being hidden by said bracket when said bracket is viewed from a side opposite said foot, the combination therewith of a guide mounted on said foot in spaced relationship with respect to said set screw for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said guide extending outwardly from said foot and being engageable upon appreciable rotation of said foot with a portion of one of said jaws, said guide being visible when said cap is viewed from said opposite side.

2. In a meter socket including a box having enclosed sides, an enclosed back, and a removable cover to close the front of said box, a terminal block mounted on said back, and a plurality of terminals for receiving conductors, said terminals being of the class having a pair of jaws including a cradle with opposed, downwardly converging side walls and a concaved bottom surface merging with said side walls, and a removable cap forming an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, the combination therewith of a guide mounted on said foot in spaced relationship with respect to said set screw for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said guide extending outwardly from said foot approximately parallel to said set screw, said guide being engageable upon appreciable rotation of said foot with a portion of said bracket.

3. In a meter socket including a box having enclosed sides, an enclosed back, and a removable cover to close the front of said box, a terminal block mounted on said back, and a plurality of terminals for receiving conductors, said terminals being of the class having a pair of jaws including a cradle with opposed, downwardly converging side walls and a concaved bottom surface merging with said side walls, and a removable cap forming an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, the combination therewith of a guide mounted on said foot in spaced relationship with respect to said set screw for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said guide extending outwardly from said foot approximately parallel to said set screw, said guide being engageable upon appreciable rotation of said foot with a portion of said bracket, and a secondary terminal mounted on said cap adjacent said bracket for providing a contact for a secondary circuit.

4. In a meter socket including a box having enclosed sides, an enclosed back, and a removable cover to close the front of said box, a terminal block mounted on said back, and a plurality of terminals for receiving conductors, said terminals being of the class having a pair of jaws including a cradle with opposed, downwardly converging side walls and a concaved bottom surface merging with said side walls, and a removable cap forming

an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, the combination therewith of a guide mounted on the end portion of said foot in spaced parallel relationship with respect to said set screw for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said guide being engageable upon any appreciable rotation of said foot with a portion of said bracket when said foot is in a retracted position adjacent said bracket.

5. In a meter socket including a box having enclosed sides, an enclosed back, a removable cover to close the front of said box, a terminal block mounted on said back, and a plurality of terminals for receiving conductors, said terminals being of the class having a pair of jaws including a cradle with opposed, downwardly conveying side walls and a concaved bottom surface merging with said side walls, and a removable cap forming an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, the combination therewith of a guide mounted on said foot, said guide including a base extending from the end of said foot, and a plate extending adjacent the side of said bracket for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said plate extending outwardly from said foot about parallel to said set screw and being engageable upon any appreciable rotation of said foot with said side of said bracket.

6. In a meter socket including a box having enclosed sides, an enclosed back, a removable cover to close the front of said box, a terminal block mounted on said back, and a plurality of terminals for receiving conductors, said terminals being of the class having a pair of jaws including a cradle with opposed, downwardly converging side walls and a concaved bottom surface merging with said side walls, and a removable cap forming an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, the combination therewith of a guide pin mounted on said foot in spaced parallel relationship with respect to said set screw for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said bracket being provided with a hole, said guide pin extending outwardly from said foot and being projectable through said hole when said foot is retracted toward said bracket.

7. In a meter box of the class having a back wall and side walls defining an open front rectangular member, a removable cover for closing the open front of said member, said cover being in spaced relationship to said back wall, a terminal block carried by said back wall between said back wall and said cover, and spade-receiving jaws carried by said terminal block, the combination therewith of a plurality of terminals carried by said terminal block and electrically connected respectively to said spade receiving jaws, said terminals having cooperating

pairs of jaws extending toward the corners of said member and providing conductor-receiving areas between respective pairs of jaws, each pair of cooperating jaws including a cradle with opposed downwardly converging side walls and a concaved bottom surface merging with said side walls, and a removable cap forming an upper jaw, said cap comprising a bracket received on said cradle, a set screw protruding through and threadedly engaging said bracket, and a foot pivotally carried by the end of said set screw and adapted to be moved between said side walls toward and away from said bottom surface of said cradle upon rotation of said set screw for cooperating with said bottom surface when moved toward said bottom surface to clamp a conductor therebetween, said foot being hidden from view through said open front by said bracket, a guide mounted on said foot in spaced relationship with respect to said set screw for maintaining said foot in proper orientation for moving between said side walls when said set screw is rotated, said guide extending outwardly from said foot and being engageable upon appreciable rotation of said foot with a portion of one of said jaws, said guide being visible through the open front of said member.

8. The structure defined in claim 7 including a secondary terminal carried by each above mentioned terminal,

said secondary terminal defining a conduit receiving area parallel to the conduit receiving area of said above mentioned terminal.

References Cited by the Examiner

UNITED STATES PATENTS

970,087	9/10	Murray	339—272
1,642,345	9/27	Telford	339—272
2,120,447	6/38	Tipsford	339—264
2,147,160	2/39	Hagist et al.	339—272
2,715,700	8/55	Rothstein et al.	339—272
2,774,953	12/56	Trier	339—272
2,780,793	2/57	Gambale	339—272
2,825,879	3/58	Moore	339—272 X
2,949,597	8/60	Nerlich	339—272
3,113,822	12/63	Sorflaten	339—272

FOREIGN PATENTS

380,049	9/23	Germany.
370,109	4/32	Great Britain.
512,701	9/39	Great Britain.
751,552	6/56	Great Britain.
833,291	4/60	Great Britain.

JOSEPH D. SEERS, *Primary Examiner.*