

F. BARR.
PULL SOCKET.
APPLICATION FILED NOV. 29, 1912.

1,064,425.

Patented June 10, 1913.

Fig. 1.

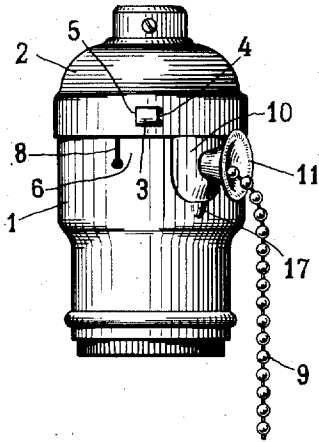


Fig. 2.

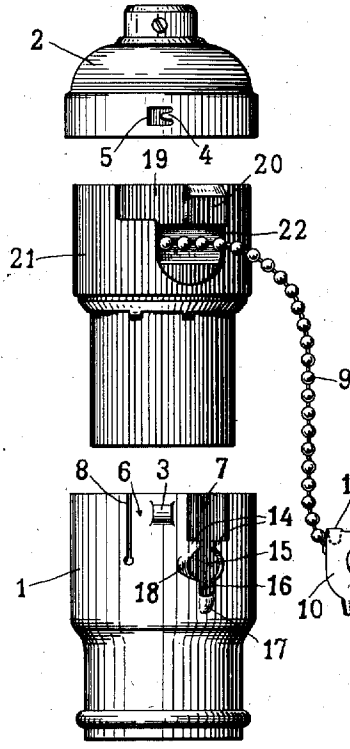


Fig. 3.

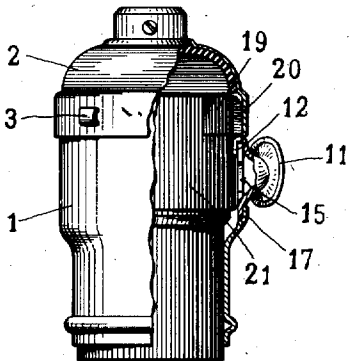


Fig. 6.

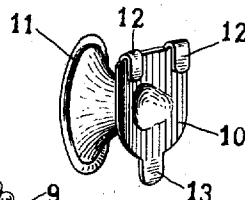


Fig. 4.

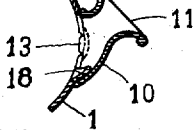
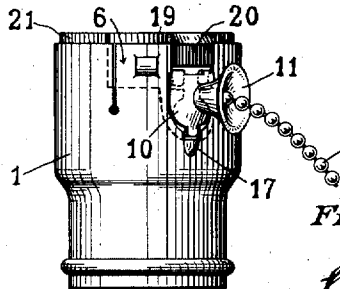


Fig. 5.



WITNESSES

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FREDERIC BARR, OF NEW YORK, N. Y.

PULL-SOCKET.

1,064,425.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed November 29, 1912. Serial No. 734,101.

To all whom it may concern:

Be it known that I, FREDERIC BARR, a citizen of the United States of America, and residing at New York, in the county of Kings and State of New York, have invented new and useful Improvements in Pull-Sockets, of which the following is a specification.

My invention relates particularly to the construction for guiding and insulating the chain.

In constructions of this character the switch mechanism is carried by an insulating body which is removably mounted in a shell or casing. The mechanism is operated by the chain which passes through one side of the casing.

The main object is to provide a simple and inexpensive form of chain guide which can be readily attached or detached from the shell so that the parts can be readily assembled or disassembled when desired.

Another object is to provide the combination in a construction of the character just described of means for insulating the chain and locating the parts so that the two parts of the shell may be readily attached and yet are held securely together and may be readily detached.

Another object is to hold the chain guide securely in position.

In its preferred form the invention contemplates a shell formed in two parts with telescopic interlocking means and a slot in one side of one part of the shell together with a chain guide having a projecting bell and a base plate with lugs for securing it to the shell. The switch mechanism is carried by an insulating block and surrounded by insulating fiber which is cut away only at a point adjacent the chain guide and adjacent the interlock.

Figure 1, is a side elevation of a socket embodying the improvements of my invention. Fig. 2, is a side elevation showing the parts of the shell, the chain guide and the switch carrying block separate. Fig. 3, is a side view and partial section through the chain guide. Fig. 4, is a fragmentary horizontal section through the chain guide. Fig. 5, is a side view showing the chain guide, the body of the shell and the insulating block being assembled. Fig. 6, is a perspective view of the chain guide detached.

The shell is in two parts, the body 1 telescoping with the cap 2. These parts are

provided with suitable interlocking devices as for instance, a projecting loop 3 and a tongue 4 for preventing longitudinal separation, one edge of the loop 3 coacting with the shoulder 5 opposite the tongue 4 for preventing relative rotation. The loop 3 is carried by a resilient portion of the body of the shell. This portion 6 is made particularly resilient by reason of the slot 7 and the slit 8.

The switch mechanism may be of any suitable type and provided with a pull cord or "chain" 9 as it is customarily called. The chain guide consists of a base plate 10 and a laterally projecting bell 11. The base plate is shaped to fit the outside of the body of the shell and is provided with lugs such as 12 and 13 for engagement with the shell. At the lower end of the slot 7 shoulders 14 are provided with which the lugs 12 are adapted to be engaged. The sides of the slot 7 serving to prevent lateral displacement of the chain guide. The slot 15 is provided for the chain 9 and an extension slot 16 is provided at the lower end of the slot 15 for the lug 13 so as to prevent lateral displacement of the chain guide at the bottom. Preferably the shell is bossed out at 17 to form a recess in the rear for the lug 13. I also preferably boss out the wall of the shell at 18 to provide freer play for the chain 9.

The switch mechanism proper is carried by a suitable insulating block 19 for instance of porcelain and this is provided with a lug 20 which projects into the slot 7 above the edge of the chain guide base plate 10. The insulating block 19 is surrounded by a layer of fiber 21 inside the shell, which fiber is cut away enough to permit the passage of the chain and also to permit easier compression of the shell part 6. It will thus be noticed that the chain is guided in a channel 22 in the block 19 within the fiber 21.

To assemble the parts the insulating block and switch mechanism (not shown) is inserted in the body 1 of the shell and the chain guide is placed in position as shown in Fig. 5, the edges of the base plate overlapping the edges of the slots 15 and 16, the lugs 12 being in position to engage the shoulders 14 and the lug 13 being in position to engage beneath the boss 17. When the insulating block 19 is pushed downward, the lug 20 engages the upper edge of the chain guide base plate and pushes the base

plate into position. The boss and cap of the shell may then be telescoped and interlocked.

While this construction requires only a minimum amount of metal and is easy to make and inexpensive, nevertheless the construction is sufficiently strong to withstand commercial usage and may be readily attached or detached when desired. Furthermore, it is held from twisting or displacement and the chain is housed within the insulating block 19 inside of the fiber 21.

What I claim is:—

1. In a pull socket switch, a shell body having a slot, a chain guide having a base plate fitting around outside the walls of the slot and having lugs fitting within the edges of the slot and arranged so as to prevent lateral displacement, a switch carrying block having a lug projecting into said slot and overstanding said base plate and a cap.

2. A pull socket switch comprising a shell having a slot with shoulders on opposite sides of said slot, a chain guide having a base plate fitting outside the said shell and having two lugs engaging in the end of said slot inside said shell.

3. A pull socket switch comprising a shell having a slot with shoulders on opposite sides of said slot, a chain guide having a base plate fitting outside the said shell and having two lugs engaging in the end of said

slot inside said shell and a switch carrying insulating block having a lug overstanding the edge of said base plate and a cap surrounding the edge of said shell body and said lug.

4. A pull socket comprising a shell having a slot with a shoulder and an extension slot and a chain guide having a base plate fitting the outside of said shell with a lug at the end to engage said shoulder and a lug at the opposite end to engage inside said shell at the end of said extension slot.

5. A pull socket comprising a shell having a slot with a shoulder on each side and an extension slot, and a chain guide having two hooked lugs bent inwardly to engage said shoulders and a third lug engaging inside the shell beneath said extension slot and means for holding said chain guide in place.

6. A pull socket comprising a shell having a slot with a shoulder on each side and an extension slot with a recessed boss, and a chain guide having two hooked lugs bent inwardly to engage said shoulders and a third lug engaging inside the shell beneath said recessed boss.

FREDERIC BARR.

Witnesses:

ROBT. S. ALLYN,
E. BRADFORD.

Correction in Letters Patent No. 1,064,425.

It is hereby certified that in Letters Patent No 1,064,425, granted June 10, 1913, upon the application of Frederic Barr, of New York, N. Y., for an improvement in "Pull-Sockets," an error appears in the printed specification requiring correction as follows: Page 2, line 1, for the word "boss" read *base*; and that the proper corrections have been made in the files and records of this office and are hereby made in said Letters Patent.

Signed and sealed this 2nd day of September, A. D., 1913.

[SEAL.]

THOMAS EWING,

Commissioner of Patents.

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While this construction requires only a minimum amount of metal and is easy to make and inexpensive, nevertheless the construction is sufficiently strong to withstand commercial usage and may be readily attached or detached when desired. Furthermore, it is held from twisting or displacement and the chain is housed within the insulating block 19 inside of the fiber 21.

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3. A pull socket switch comprising a shell having a slot with shoulders on opposite sides of said slot, a chain guide having a base plate fitting outside the said shell and having two lugs engaging in the end of said

slot inside said shell and a switch carrying insulating block having a lug overstanding the edge of said base plate and a cap surrounding the edge of said shell body and said lug. 35

4. A pull socket comprising a shell having a slot with a shoulder and an extension slot and a chain guide having a base plate fitting the outside of said shell with a lug at the end to engage said shoulder and a lug at the opposite end to engage inside said shell at the end of said extension slot. 40

5. A pull socket comprising a shell having a slot with a shoulder on each side and an extension slot, and a chain guide having two hooked lugs bent inwardly to engage said shoulders and a third lug engaging inside the shell beneath said extension slot and means for holding said chain guide in place. 45

6. A pull socket comprising a shell having a slot with a shoulder on each side and an extension slot with a recessed boss, and a chain guide having two hooked lugs bent inwardly to engage said shoulders and a third lug engaging inside the shell beneath said recessed boss. 50

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