H. P. DONLE.

VACUUM TUBE BASE.

APPLICATION FILED SEPT. 27, 1919.

1,374,832. Patented Apr. 12, 1921.

Fig. 1.

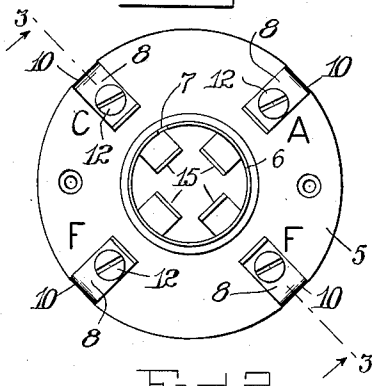


Fig. 2.

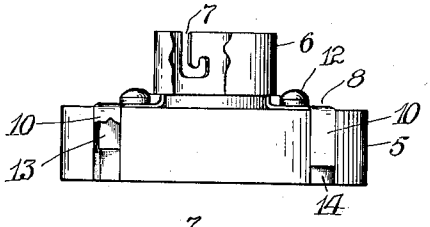


Fig. 3.

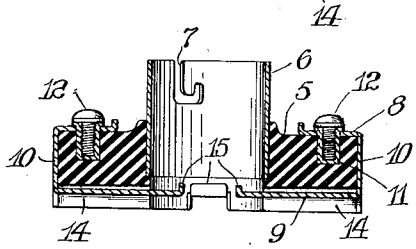
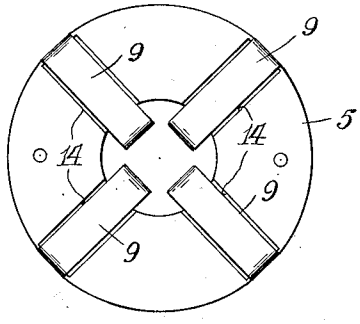


Fig. 4.



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VACUUM-TUBE BASE.

1,374,832. Specification of Letters Patent. Patented Apr. 12, 1921.

Application filed September 27, 1919. Serial No. 326,914.

To all whom it may concern:

Be it known that I, HAROLD P. DONLE, a citizen of the United States of America, residing at Meriden, Connecticut, have invented a new and useful Vacuum-Tube Base, of which the following is a specification.

My invention relates particularly to improvements in the construction of bases or sockets for tubes for radio communication and the like.

The main object is to provide a simple and inexpensive construction which may be readily connected in circuit and into which and from which the tube may be inserted or removed readily.

Figure 1 is a plan view of a device embodying the improvements of my invention.

Fig. 2 is a side view of the same, part being broken away.

Fig. 3 is a sectional view on the plane of the line 3—3 of Fig. 1.

Fig. 4 is a bottom view of the device.

The base 5 may be of any suitable insulating material. The socket 6 for the tube is preferably molded into the base and may be provided with one or more bayonet slots 7 or other method for holding the tube. A plurality of terminal members is provided all of which are alike. Each is formed of a strip of metal bent to embrace the base. Each has an upper part 8 and a lower part 9 connected by part 10. An interiorly threaded stud 11 is molded into the upper part of the base and riveted over at its outer end to secure the terminal part 8 to the base. A screw 12 is screwed into the stud 11 and in conjunction with the part 8 forms the means for connecting one of the circuit wires.

The outer wall of the edge of the base is preferably grooved at 13 to receive the connecting part 10 of the terminal strip. The bottom of the base is grooved at 14 to receive the contact arm 9. The parts are so proportioned and arranged that the contact part 9 is yielding and has a considerable range of movement so as to insure perfect contact without injury to any of the parts. The slot 14 is preferably somewhat wider than the contact part 9 so as to allow freedom of movement. The contact arm 9 is also preferably spaced apart from the bottom of the groove 14 so as to keep it out of contact with the base. On the other hand, the part 10 may fit more or less snugly in the groove 13. The ends of the contact terminals 9 may be upturned as at 15 to form the contact tips. It will thus be seen that the contact arms are mounted so that they may move up and down with practically no friction. Each contact arm is a free moving spring supported at a single point. In this particular construction the point of support is on the front of the base and lateral position is maintained by the engagement of the part 10 in the groove 13 at the side.

This construction will be seen to be simple and yet rugged and the parts are readily accessible for wiring and for attachment and detachment of the tube. The construction also insures uniform action of the different contacts at all times.

I claim:

1. In a device of the character described, a base of insulating material having a plurality of studs embedded therein, a terminal strip secured to the base by each stud having an outer terminal portion and bent around the edge of the base and provided with a lower contact portion, and a socket for the tube.

2. In a device of the character described, an insulating base having grooves at the rear and grooves in the edge, a tube socket secured to the base, contact arms located in the grooves at the rear and having side portions located in the grooves in the edge of the base and having circuit terminal portions at the front of the base.

3. In a device of the character described, an insulating base, a tube socket secured therein, a stud embedded in the outer face of the base at one side of the tube, a metal strip secured to the base by said stud and having an outer terminal portion, a binding screw coacting therewith, said strip having a spring contact arm at the rear of the base with its end extending in line with the opening in said tube.

4. In a device of the character described, a base, a tube support secured thereto, a series of metallic members secured to the front of the base and extending around the edges of the base and having freely movable spring arm portions at the rear of the base

with their ends accessible through said tube support, and means at the edge of the base for laterally positioning said members.

5. In a device of the character described, a base, a tube support secured thereto, a series of metallic members secured to the front of the base and extending around the edges of the base and having freely movable spring arm portions at the rear of the base with their ends accessible through said tube support, and binding screws coacting with portions of the metallic members.

6. In a device of the character described, an insulating base, a tubular socket projecting from the center thereof, said base having four grooves in the edge thereof and a radial groove in the bottom connecting with each edge groove, a screw-receiving member embedded in the front of the base above each of the grooves in the bottom of the base, and a conducting strip secured to each of the screw-receiving members at the front of the base and extending in the edge groove adjacent thereto and in the bottom groove beneath said screw-receiving member and terminating in a spring contact tip in line with said socket.

7. In a device of the character described, an insulating base having an opening, a socket in line with said opening, and a combined terminal and contact member secured to said base and consisting of a terminal portion on the outer face of the base at one side of said socket, a spring arm portion on the back of the base beneath said terminal portion having a yieldable tip in line with the rear of said socket, and a connecting portion extending around the edge of the base, and a binding member associated with said terminal portion.

HAROLD POTTER DONLE.