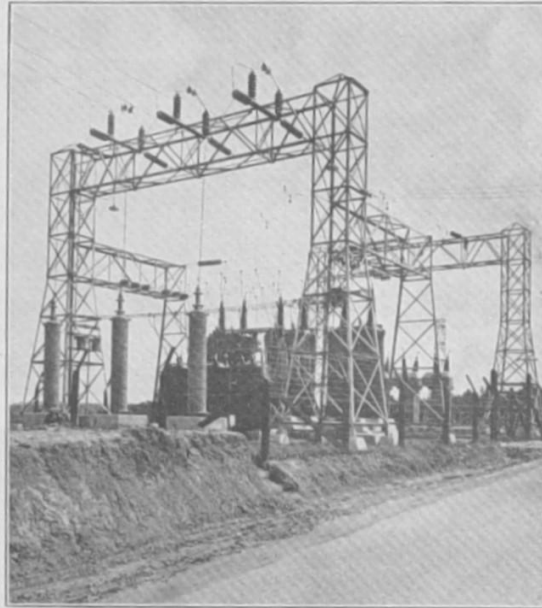


Bulletin 601

Bennett Lightning Arresters



**ELECTRIC POWER
EQUIPMENT CORPORATION**

AGENTS IN PRINCIPAL CITIES

APRIL, 1924

Goodyear and Hammersley

INCORPORATED

30 Church Street



Introducing

BENNETT LIGHTNING ARRESTERS

Now and henceforth produced exclusively by
ELECTRIC POWER EQUIPMENT CORPORATION

THE Bennett Lightning Arrester, while a radical departure from other devices of similar purpose, is not an experiment. It is, on the contrary, soundly conservative in principle and measured by the standard of practical performance in many heavy-duty installations, is the equivalent of an old established success in service. So much for what it *has* done.

Now for what it *will* do. The majority of you who read this are users of "ELPECO" Equipment. You know exactly what it means when we assure you that our reputation is pledged squarely and without reservation on the worthiness of the Bennett Lightning Arrester as a unit of the "ELPECO" Line.

To the diminishing minority without personal experience with "ELPECO" Equipment, you may write your own guarantee. Start with this thought as a basis.

We guarantee the Bennett Lightning Arrester, when properly installed, to function to your entire satisfaction under any practical service condition; with equal precision whether indoors or out; in wet weather or dry; with a closer setting of arc-gap, resulting in a higher degree of protective efficiency than any other device of similar purpose.

Theory of Operation

At the instant of discharge the current spans the arc-gap and is carried directly down the electrode rod through the carbon electrode to the solution column inside the bushing. This solution column offers a non-inductive path through which the high voltage discharge is carried directly to the ground connection.

When the dynamic current follows a discharge across the gap, the resistance of the solution column in the tube is sufficient to prevent an undesirably heavy flow of dynamic current to the ground.

As the discharge continues, the solution in contact with the carbon electrode becomes rapidly vaporized and sufficient pressure is developed to press the solution column downward inside the porcelain tube, the space formerly occupied by the solution being taken up by a conducting vapor of much higher resistance. (See Fig. 9.)

When enough of this vapor has been interposed in its path, the current is so reduced in value that the arc at the outside gap cannot be maintained and current flow ceases.

Details of Construction Bennett Lightning Arresters

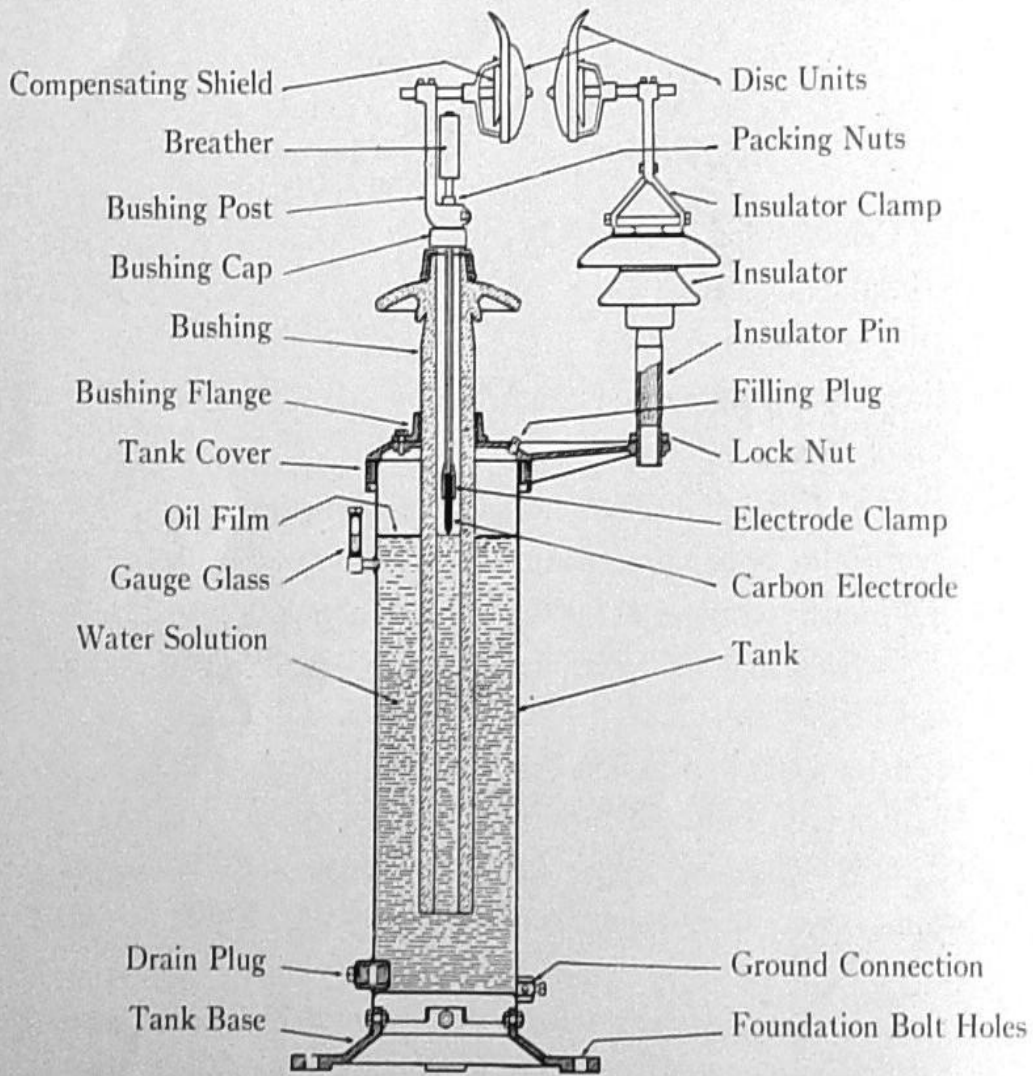


Figure 1
Cross Section of D-24 Bennett Arrester

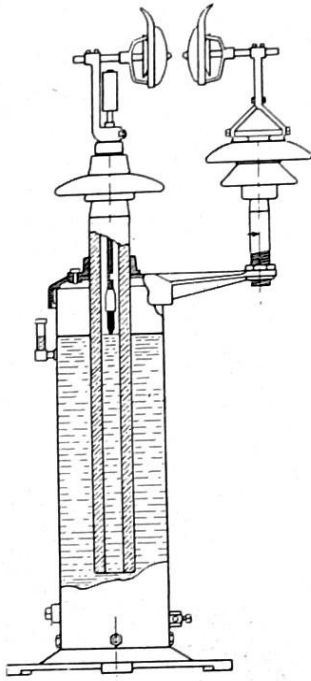


Figure 8
Cross Section (Normal)

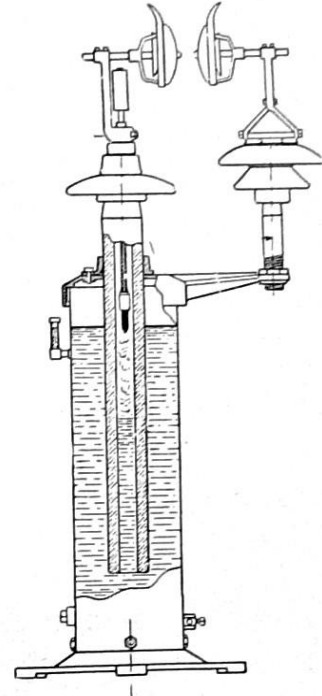


Figure 9
Cross Section (Discharging)

