against the possibility of the line coming into contact with the metallic substance by breakage or otherwise.

Supports for Overhead Lines.

26. All aerial wires shall be attached to suitable insulators, carried on cross-arms of suitable material and cross-section, and they shall be so attached to the insulators or guarded that they cannot fall away from the support. Conductors covered with insulating material shall be so attached that their insulation shall not be impaired where they are secured to the insulator.

Every support for an aerial line shall be of durable material and properly strengthened against forces due to wind-pressure, change of direction of line, and unequal length of span. The factor of safety of such supports outside town limits shall be such that the moment resulting from a wind-pressure of 30 lb. per square foot on plane surfaces and 18 lb. per square foot of diametral plane upon a cylindrical surface upon the lines and supports shall not exceed one-half of the applied moment which is sufficient to cripple the support if of iron, steel, or ferro-concrete, and shall not exceed one-fourth of the breaking stress in the case of wood. The factor of safety of supports within the town limits shall be four in the case of steel, iron, or ferro-concrete, and five in the case of wood, calculated upon the ultimate strength of material under the same conditions of wind-pressure as hereinbefore mentioned.

The distance between supports within town limits shall not exceed 150 ft. except by approval of the Minister.

Location of Overhead Lines.

27. Except by permission of the Minister of Telegraphs, or subject to an agreement between the Post and Telegraph Department and the Board, all overhead electric lines shall be placed on the opposite side of the street to that on which any telegraph lines exist; and where the erection of the electric lines necessitates the alteration of any telegraph lines, and such alteration is approved by the Minister of Telegraphs, the cost of the alteration shall be borne by the Board.

In running the lines authorized by this license through or along any street where no telegraph line exists the Board shall keep to one side of the street, and in running service wires to the opposite side of the street the Board shall arrange so as to interfere as little as possible with the route of any future telegraph lines.

Lines not in Use.

28. An aerial line shall not be permitted to remain erected after it has ceased to be used for the supply of energy unless the Board intends within a reasonable time again to take it into use.

Post and Telegraph.

29. Where electric lines are permitted to be supported on telegraph poles all details of the supports and the insulation shall be approved by the Minister of Telegraphs, who may, on giving to the Board reasonable notice in that behalf, require the Board to remove such electric lines at any time from such telegraph poles, and without payment of any compensation to the Board.

In every crossing-span the maximum tension in any wire shall not exceed one-half the elastic limit of the wire under the conditions of minimum temperature and wind-pressure specified in clause 25.

At telegraph crossings the electric lines shall pass over or under the telegraph wires or cables, as may be decided by the Minister of Telegraphs, and shall be at least 2 ft. distant. Where it is impracticable to cross above or below, the electric lines may be taken through, but, when permitted to be taken through, the crossing shall be made at a pole in a manner to be approved by the Minister of Telegraphs.

Where telegraph lines and lead-covered telephone cables are crossed above or below by the electric-light wires the latter wires shall be insulated with a triple covering of jute braiding thoroughly compounded throughout the crossing-span.

In cases where it may be required to cross with the electric-light wires through any other aerial wires or through cables because of the impracticability of crossing above or below (and crossing shall be effected above or below if possible), all such through crossings, if permitted, shall be effected at a pole. In every case of a through crossing, no matter whose property the lines crossed through may be, the method of carrying the electric-light wires across the pole, of protecting them thereon, of preventing other wires from coming in contact with them, and of protecting persons working on the poles from danger of shock, shall be to the satisfaction of the Minister of Telegraphs. The electric-light wires shall be insulated where they pass through on the poles and over the whole length of the span on each side of the pole crossed through. Where the insulated wires cross through on the pole they shall be encased in some approved hard protecting substance for the entire length of the arms on such pole. If metal pipe is used to encase the wires it shall be effectively earthed.

Where the electric lines intersect telegraph lines the latter shall be suitably insulated if deemed necessary, and when the crossing is above and near a pole the spans on each side of the pole shall be insulated if deemed necessary. This insulation shall be effected at the expense of the Board in cases where the telegraph lines existed previously to the erection of the electric lines.

Where deemed necessary efficient guard-wires, effectively earthed, or other approved protective devices, shall be erected in a manner to meet with the approval of the Minister of Telegraphs at all crossings or places where electric lines intersect telegraph lines, or at any place where such protection may be considered necessary.

Such guard-wires shall be carried on substantial supports at a height of 2 ft. above the electric lines if the telegraph wires pass over the electric lines, or 2 ft. above the telegraph wires if they pass under the electric lines. In addition to the above precautions, telegraph wires may be insulated if deemed necessary by the Minister of Telegraphs.

The cost of all necessary guard-wires and special provisions required to comply with this clause shall be borne by the Board when the telegraph lines are erected before the electric lines. In other cases the Board, on receipt of notice from the District Telegraph Engineer of the Post and Telegraph Department, or his deputy, that it is proposed to run a telegraph line along the route, shall forthwith make the necessary changes required to comply with this clause at any point at which electric lines already cross such routes, the cost of such changes being borne by the Post and Telegraph Department.

Earth-wires.

30. Earth-wires, where led down poles, shall be protected by a casing for a distance of 8 ft. from the ground. A test shall be made every three months, and oftener if required, of all earths, to ensure that the earth-wire is intact and that the earth is effective.

Railway Crossings.

31. No work of any nature shall be erected or constructed in pursuance of this license upon, over, or under any part of the Government railways until the Board has obtained the consent of the Minister of Railways thereto, as required by section 4 of the Government Railways Amendment Act, 1910 (No. 2).

Service Connections.

32. Service connections from aerial lines shall be taken direct from insulators, and shall not be tapped off between insulators. They shall be led as directly as possible to insulators firmly attached to some portion of the consumer's premises which is not accessible to any person without the use of a ladder or other special appliance.

Every portion of any aerial line which is outside a building and is within 7 ft. from any part of the building shall be rubber-insulated.

Facilities for Service Connections, &c.

33. Where electric lines are on one side of the road and telegraph lines on the other, and service is required to be given from either to the other side of the road, the Board and the Minister of Telegraphs shall give to each other reasonable facilities as far as possible to effect supply. In special circumstances the Minister of Telegraphs and the Board shall give to each other reasonable facilities for the joint use of poles.

Arc Lamps.

34. All arc lamps shall be so guarded as to prevent pieces of ignited carbon or broken glass falling from them, and shall not be used in situations where there is any danger of the presence of explosive dust or gas.

Arc lamps used in any street for public lighting shall be so fixed as not to be in any part at a less height than 10 ft. from the ground.

Arc lamps used in any street for private lighting shall be so fixed as not to be in any part at a less height than 8 ft. from the ground, and shall be so screened as to prevent risk of contact with persons.

Arc lamps must be insulated from earth and be fixed so that they cannot swing into contact with any substance, metallic or otherwise, that might connect them to earth. They may be run in series, and at any available voltage up to 230 volts. Resistances for the regulation of arc lamps, if exterior to the lamp, shall be mounted on incombustible