

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G83.905
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AT&T Co Standard

TOOLS

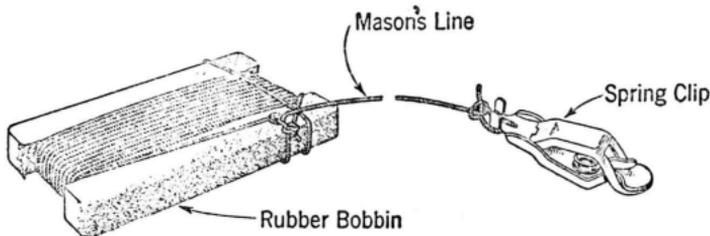
CLEARANCE MEASURING LINE

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I. GENERAL

1.01 The Clearance Measuring Line is intended primarily for use in measuring the height of drop wires over streets, highways, etc., so as to obtain the required clearance but it may also be used in checking the height of open wire, cable and guys above streets, highways, etc., provided, of course, that their height is not too great to permit the use of the measuring line. The required clearances are outlined in Section G10.301. Although that section also covers the vertical clearances between telephone wires, cables and guys and foreign wires, cables and guys, do not attempt to measure these clearances with the clearance measuring line as it has not been designed to be tossed over lines other than telephone plant. **NEVER USE CLEARANCE MEASURING LINE IF THERE IS A POSSIBILITY OF ITS COMING IN CONTACT WITH SUPPLY WIRES OR EQUIPMENT OR OTHER FOREIGN WIRES.**

1.02 The Clearance Measuring Line consists of a length of mason's line attached to a rubber bobbin at one end and a spring clip at the other end. The line measures 18 ft. between the clip and the bobbin.

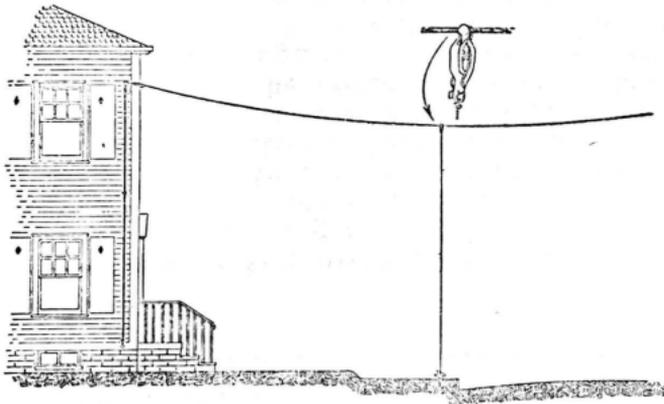


2. USE—New Drops

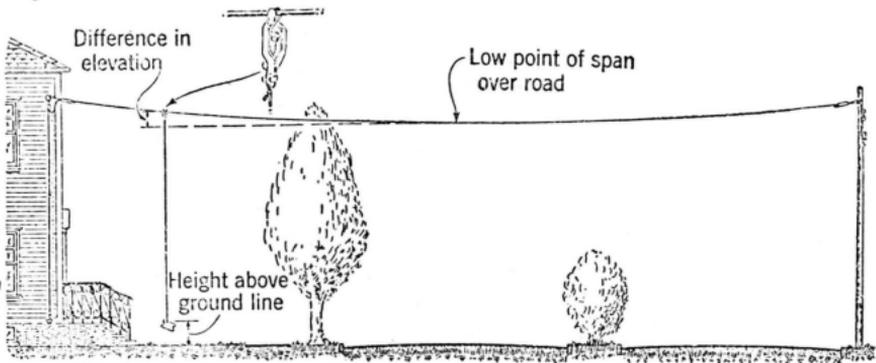
2.01 After making first attachment on building,

(a) Unwind line from rubber bobbin.

(b) Place spring clip on drop wire at a point where the line will not be struck by moving traffic as for example along the edge of a driveway, close to the curb line or its approximate location where there is no curb.



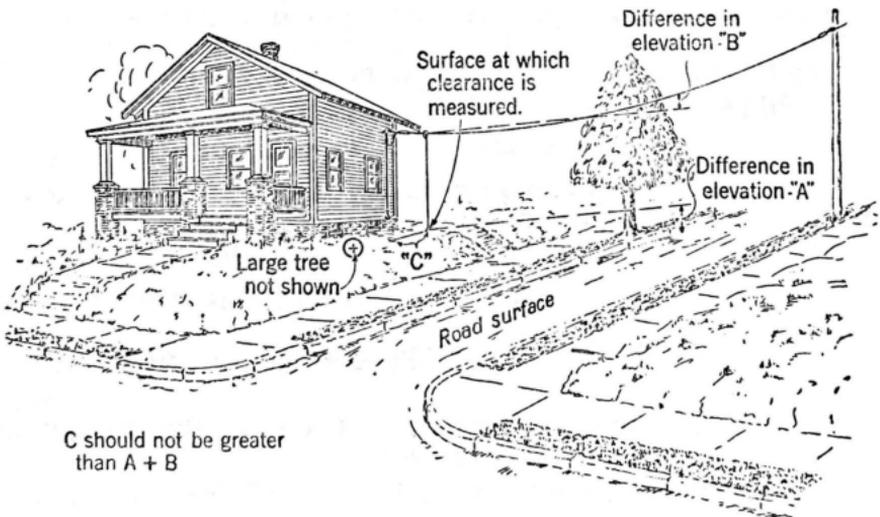
2.02 Make attachment on pole and string wire with the specified sag using Clearance Measuring Line as a guide in obtaining the required road clearance. If the clip is located at or on a level with the low point in the span over the road and the point on the ground under the clip is at the same level as the high point of the road, the clearance measuring line will serve as a direct measurement. (To measure clearances less than 18 feet, tie a slip knot at the end of the length of mason's line required and then pull on the loop until the bobbin meets the knot.) If, however, it is necessary to locate the clip above the low point in the span over the road because trees or other objects interfere, estimate the differences in elevation as illustrated below and pull the drop wire up until the rubber bobbin is located an equivalent height above the ground.



Note: Height of bobbin above ground line should be at least equal to the difference in elevation between location of clip and low point of span over road.

If in addition the surface at which the clearance is measured is above or below the high point of the road make allowance for the difference in the elevation (A) of these points as well as for the difference in the elevation (B) of the clip and the low point in the span over the road. When pulling drop wire up under conditions as illustrated below (drop wire clears tree but lower branches interfere with measuring clearance at curb line) the length of the line remaining on the ground (C) should not be greater than the sum of the differences in elevation.

Measuring clearance where the lower branches of the tree interfere with measuring at curb line.



C should not be greater than A + B

2.03 Release spring clip from drop wire by pulling steadily on the line from any position not immediately under the clip. Do not jerk line or look up while disengaging clip.

2.04 Rewind line on bobbin.

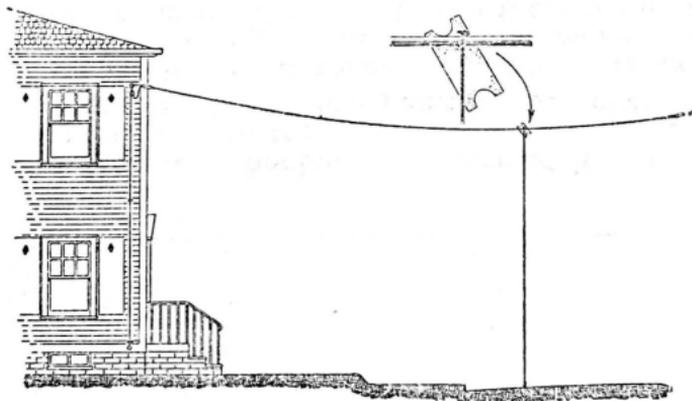
3. USE--Existing Plant

3.01 Select location for tossing bobbin over wire or strand as close as possible to the low point in the span over the roadway but not in the path of travel.

3.02 Unwind mason's line from rubber bobbin.

3.03 Hold clip end of line with one hand and while standing directly under wire or strand (having made sure that line will not cross over or come in contact with foreign wire) toss rubber bobbin over the wire or strand with the other hand, so that it falls as though dropped from aloft. Do not toss bobbin from a position to the side of the wire or strand inasmuch as the bobbin will have a tendency to wrap the mason's line around the wire or strand.

3.04 Move approximately five feet to the side of the wire or strand opposite the side on which the bobbin hangs and then pull bobbin up to the level of the wire or strand.



6 6

3.05 Check clearance with the length of the mason's line and then let go to permit bobbin to fall taking precautions to prevent the falling clip from hitting the eye. If bobbin does not drop, flip line to start it moving. If this is not effective due to the bobbin being held in position by the cable, pull the bobbin over the strand.

3.06 Rewind line on bobbin.

3.07 Where trees or other obstruction prohibit checking the clearance as outlined in paragraph 3.05, check the clearance at the most convenient point other than in the lane of travel, making allowance for the differences in elevation as described in paragraph 2.02.