



FIG. 1.

minum and iron, copper and iron and other combinations may be used, except that there is a loss in sensitiveness in the order indicated. Two pieces or strips *E* and *E'*, each about 9.0 mm. in width and 6.0 mm. thickness are riveted together and imbedded in solder *V* at the bottom of the casing. A screw *N* and lock-nut *R* provide means of adjustment of the parts. This method of construction makes a rigid column which is not subject to the vibrations common in a laboratory. In practise, the casing is filled with glycerin, which increases the continuity of parts and prevents corrosion of the metallic couple.

The advantages of this design other than those already mentioned are apparent. First, the generous length of the metallic couple insures a maximum of sensitiveness. Second, this sensitiveness is further increased by the mechanical advantage of the lever. Third, continued movement of the bimetallic column in either direction imposes no strain upon any of the parts of the mechanism, a feature not incorporated in thermostats to be found on the market, and one which makes possible accurate control with least adjustment for long and continuous periods of time.

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