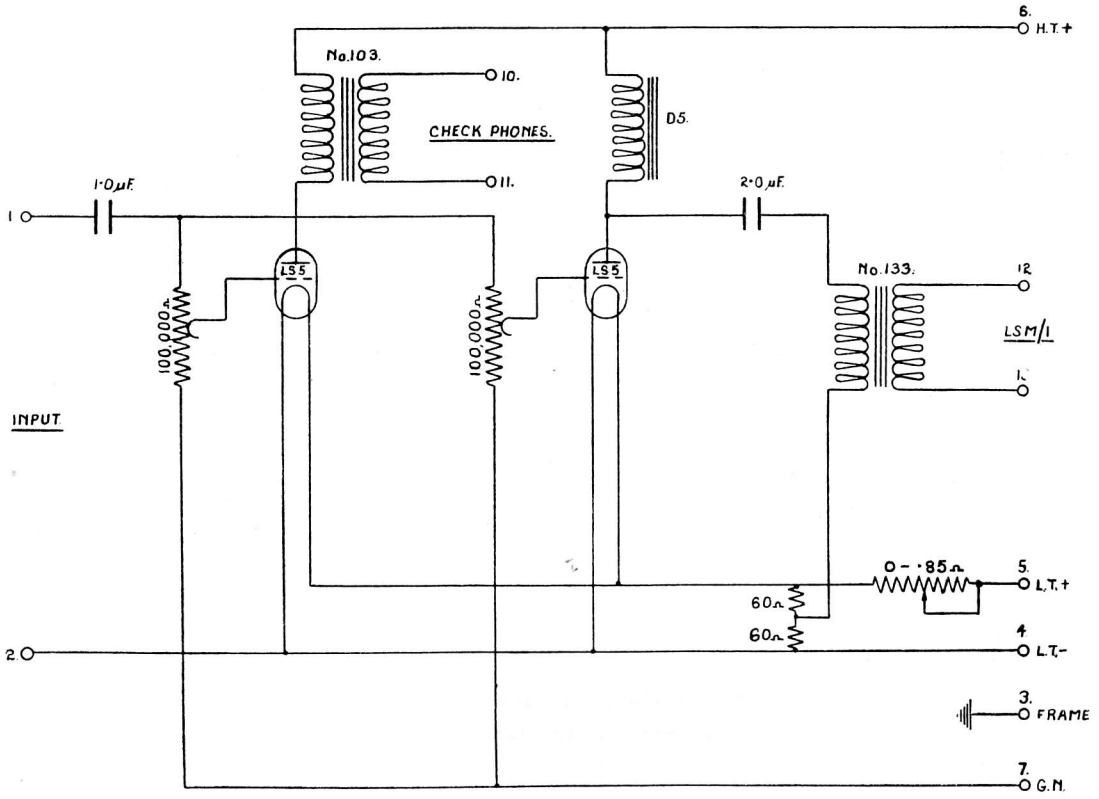
AMPLIFIER CPL/1



*Drawing A.*1083, *Issue* 2.

This amplifier operates in the output of the check receiver. It has two output circuits one of which feeds checkphones and the other loudspeaker circuits, respectively.

It is used at **London (Broadcasting House), Birmingham, Bristol, Cardiff, Edinburgh** and **Plymouth.**

Circuit

It comprises two single-stage amplifiers with a common high-impedance input circuit, which is resistance-capacity coupled to the output of the receiver unit. The loudspeaker output is resistance-capacity coupled to the output transformer and the checkphones output is provided by a transformer with its primary connected in series with the anode.

Impedances

Input impedance	(approx)	50,000 ohms
CP. Output impedance	(approx)	500 ohms
LS. Output impedance	(approx)	530 ohms

Transformers

	Number	*Impedance Ratio*	*Turns Ratio*
CP Output	103	12/1	3.46/1
LS Output	133	12/1	3.46/1

Volume Control

Two continuously variable potentiometers of resistance 100,000 ohms (approx).

Supply Data

Stage	*Valve*	*Grid Bias* Volts negative	*Anode Current* mA (approx)	*Filaments* Volts	Amps
CP	LS.5	24	27	5	0.8
LS	LS.5	24	17	5	0.8
	Total		44		1.6

High Tension Supply .. .. 300 volts
Low Tension Supply .. .. 6 volts (adjusted to 5V by a series resistance)

Working Voltage Gain

Testing Conditions

Volume controls set for maximum output.
CP output loaded with 1,000 ohms and LS output loaded with 750 ohms. Output in both cases at approximately zero level

Gain at 1,000 c/s.

CP Output .. .. 0 ± 1 db.
LS Output .. .. -1 ± 1 db.