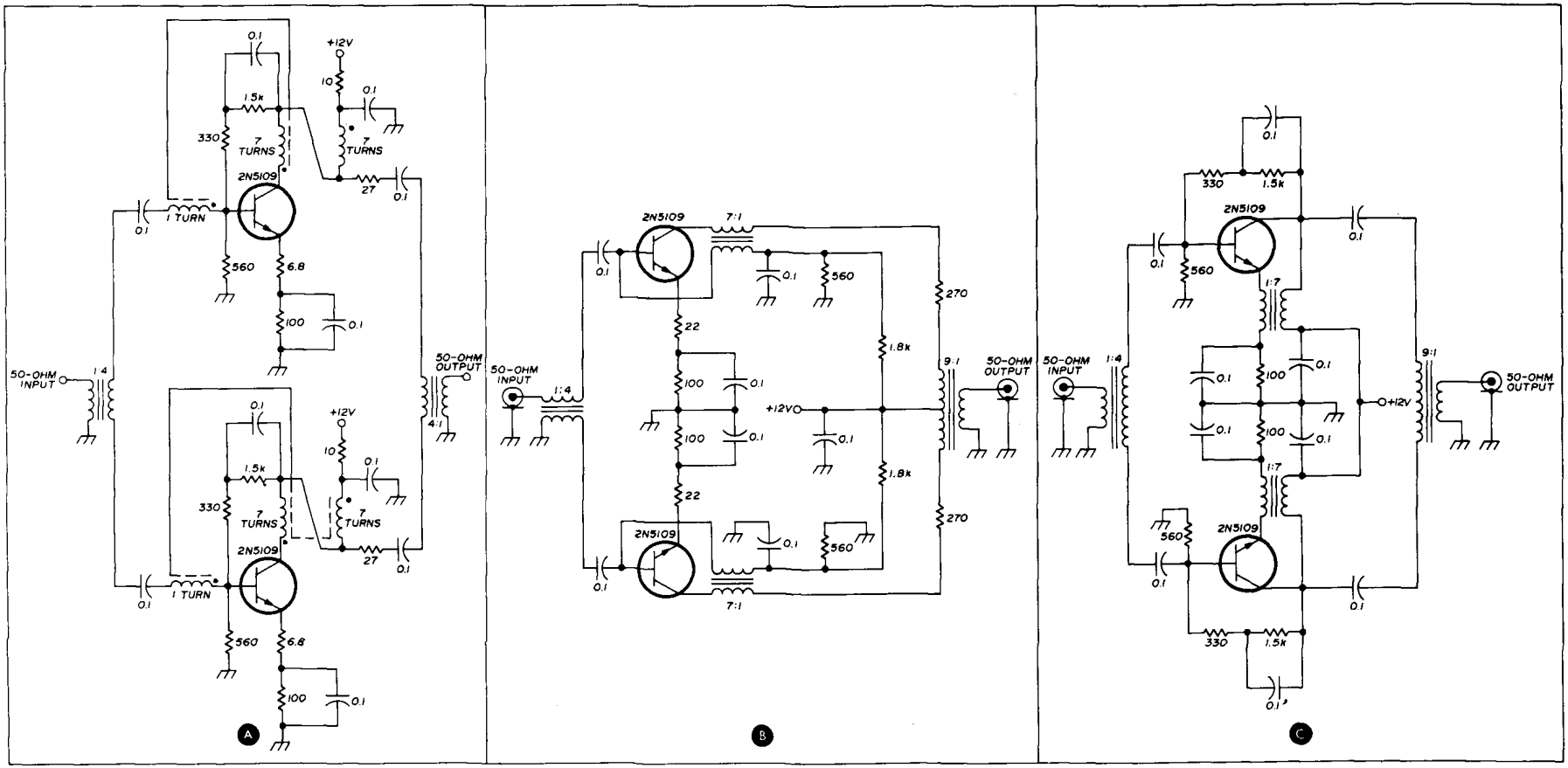

A. Circuit using current and voltage feedback for improved linearity and transformers for stabilizing input and output impedance from 100 kHz to 200 MHz. Amplifier has low output impedance; the two 27-ohm resistors are used to increase this value.

B. An improved version of the circuit in A. Output impedance is very high. Agc can be applied by replacing the two 270-ohm resistors with a single pin diode shunt regulator. This circuit is less expensive and simpler than a constant-impedance, T-attenuator.

C. Low-noise version with emitter feedback for extremely high input and output impedance. Amplification is 7 (1:7 turns ratio) and input impedance is 300 ohms divided by 7, or 47 ohms. Output impedance is several hundred ohms. Noise figure of less than 2 dB can be obtained.

fig. 14. Three push-pull arrangements for high linearity input rf stages.