Fig. 2. Arrangement of the electrical part of the apparatus. $C_{\rm H}$ is the magnetizing coil (open solenoid with natural air cooling); the solenoid constant K is 122 Oe/A; the internal max diameter, length, and region of homogeneous field of the solenoid are 60, 670, and 200 mm respectively. $C_{\rm m}$ is the measuring coil (length of winding 160 mm); $C_{\rm c}$ is the compensating coil; $R_{\rm Sh}$ is a rheostat shunting $C_{\rm c}$; Fl is a fluxmeter of the Grassot type with a flux constant of $c_{\rm W}=380\pm5$ Mx/division and a permissible external resistance of $R_{\rm ext}$ < 30 Ω . Distance to the scale about 3 m.

Key

- 1) V
- 2) Sample
- 3) CH
- 4) Fl
- 5) Cm
- 6) C_c
- 7) R_{Sh}

The value of the effect under consideration is calculated from the formula

....R.p. 421

where...., n is the number of turns in C_m, & is the deflection scale of the fluxmeter in divisions, and....(atm).

For the iron sample studied, $I_s = 1690$ G and S = 0.26 cm². From the 22 measurements made we found....; from this, according to (2):

....R.p. 421

(2)

(TITAL)