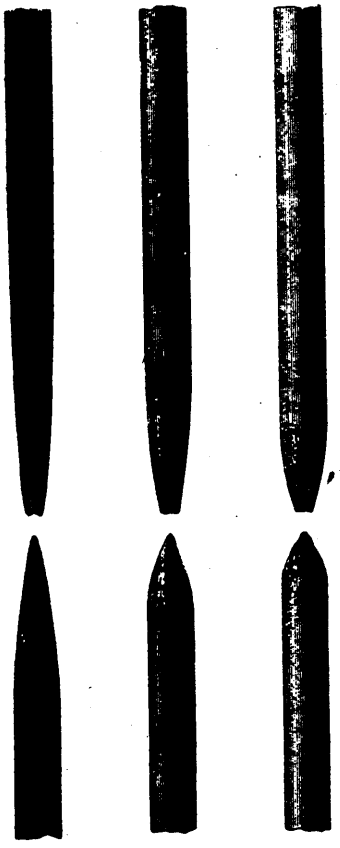
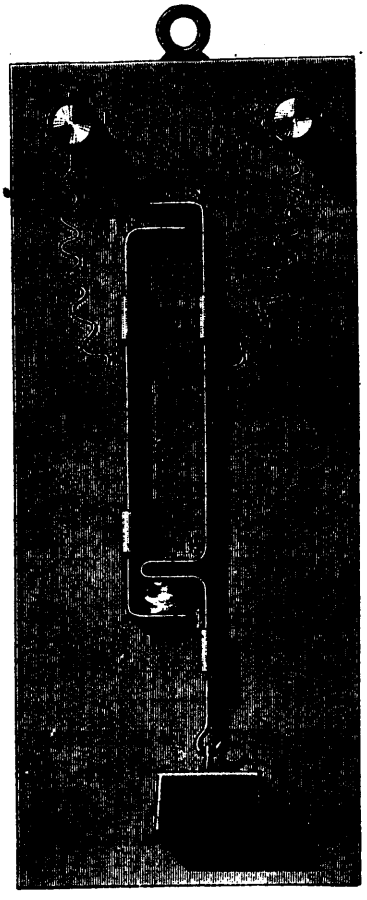
Fig. 1. Fig. 2. Fig. 3.





ELECTRICAL FIRE INDICATOR.

Dimensions	State of the surface.	Consumption per hour in millimeters.			Length of the consumed part in millimeters.		Light in Carcel burners.
		+	−	Total.	+	−	
Diam., 7 millimet'r	Naked, Fig. 1 ...	166	68	234	53	23	947
	Coppered, Fig. 2..	146	40	186	24	10	?
	Nickeled, Fig. 3..	106	38	144	12	7	947
Diam., 9 millimet'r	Naked	104	50	154	45	23	523
	Coppered	98	34	132	27.	7	553
	Nickeled	68	36	104	21	7½	516

COMPARATIVE EXPERIMENTS MADE WITH NAKED AND METALLIZED CARBONS.

BY E. REYNIER.

These experiments were made at the works of Lautter & Lemonier, using a Gramme machine of the type of 1876, and burning Carré carbons. The positive carbons covered with copper gave a very good shape, and an excellent one when covered with nickel; with the negative carbon the shape was a little too short when nickeled. Independently of the improvement of the shape positive carbon, the nickel increased the duration of carbons nine millimeter diameter *fifty per cent.*, and those of seven millimeter *sixty-two per cent.* The coppered carbons thus occupy a position mid-way between the naked carbons and the nickeled ones.

For equal section the metallization does not modify the illumination.

Among the refractory metals, nickel is to be preferred, especially for the positive pole (iron being very difficult to apply in thin coats.)

The figures represent the shapes of the naked and metallized carbons: Fig. 1, the naked carbons; Fig. 2, copper covered; Fig. 3, those covered with nickel.—*La Lumière Electrique.*