

sponds to a pressure of .15 mm. and in the second to a pressure of .08 mm. The rate of movement, as was to be expected, is greater for the lower pressure than it was for the higher one. The fact that positive charges were acquired under these circumstances lends further support to the conclusion drawn from the earlier experiments that equal quantities of opposite kinds of electricity were emitted with the rays from uranium nitrate when freely exposed.

TABLE IV.

Min.	Time Secs.	Deflections in mm. on Scale.
0	..	0
5	..	18
7	40	27
12	30	44
17	55	62.5
24	10	85
29	40	101
41	10	132
50	55	151
59	10	165
68	25	177
80	10	188
90	40	194
93	40	195

V. POTASSIUM SALTS: ELECTRICAL CHARGING ACTION.

In making the observations with potassium salts pieces of apparatus similar in form and dimensions to the two shown in Figs. III and IV were used in turn. In the first experiment a layer of potassium chloride, about 4 mms. thick, was spread on the tray BB in Fig. III, and then the space surrounding the tray was as highly evacuated as possible.

Some preliminary observations had shown that extreme care had to be taken to see that no electrification was imparted by friction to the insulating support HH, during the operation of setting up the apparatus. Even touching it slightly with the finger or allowing its surface to be scraped with any object, was found to leave an electrification behind