

"Phantom
Shadow"
Discovered by
Lester W. J. Hammer
"Edison effect" called
the basis of
radio tube
industry

Fig 1.

which apparatus may be found
sketched & described in Edison's
Laboratory Note Books as well
as an apparatus as per fig
II many notes were taken
of this fluorescence & its
different characteristics & I
have since abroad & in this
country tried the effect of
magnetic influence upon
the current circulating over
the carbon & principally in

elevation created differences of density of the blue as well as altering the character from time to time to a halo about the carbon to a sort of stratification. Between the two poles where they are joined by the composition non magnetic metal I succeeded in dissipating the fluorescence entirely. I noted the lines of blue when I concentrated them took the general direction of the dense magnetic rays & seemed evidently polarized & set in the "magnetic stream".

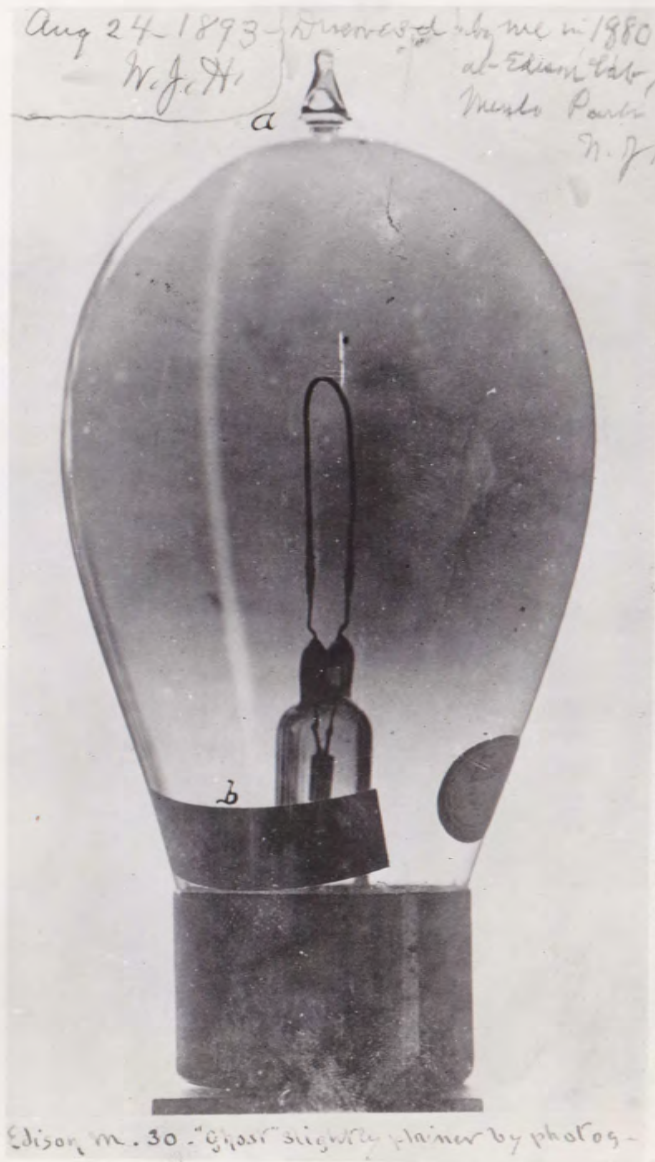
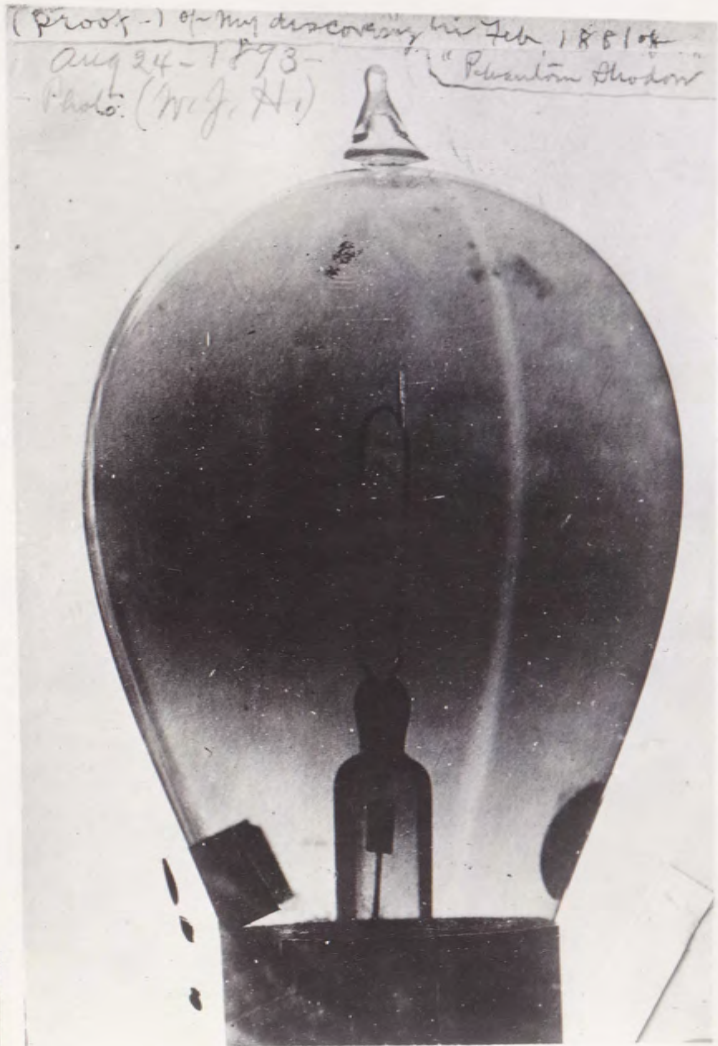
I claim I have with this apparatus demonstrated the interference produced in Edison's H. 400 light - between the poles of his three magnets & proved the inadvisability of using more than one.

connection with the blue fluores-
escence remarked. The early
part of this week I think Oct-4
1894 was witnessing some of
Professor Radium's Experiments at
Messrs. Queen's Exhibit & remarked
a similarity in the effect
Crookes had observed upon
his Experiments upon
"Radiant matter" as he calls it
under magnetic influence &
the phenomena noticed by
myself & others in our Menlo
Park Experiments since I went
this morning to get Queen's man
to show I him what I meant
& not finding him attached
a large Edison Lamp on the
Mr. Swan & the other gentlemen
made a number of experiments
which I claim were new &
which were so far successful
as to convince me or at least
suggest strongly to me that
such an apparatus could be
made to test the density, Equality
& general character of the mag-
netic field, show the lines
of magnetic force & their direction
test the polarity of the dynamo

solid pole in place of many
of emmages I noted the
same differences of density
in different parts of the
magnetic field.

File Copy

File Copy



Photos showing "phantom shadow", which W. J. Hammer, Edison's chief engineer, claims to have discovered. Dates on these photos are 1880 and 1881; dates on articles, etc., are predominantly 1880. (G. H. Clark)