

LABORATORY NOTES

No. *2 A.S.*

EDWARD WESTON,

NEWARK, N. J.

Notes on some new salts of Nickel & Boron

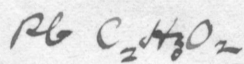
The borosulphate of nickel, or borosulphate is decomposed by the addition of ammonia an abundant greenish blue precipitate being formed, which is soluble in excess of ammonia forming a ~~very~~ azure blue or clear solution.

The precipitate is readily dissolved by sulphuric acid forming a green solution.

The ppt is soluble in H_2SO_4 and in HCl

The solution in H_2SO_4 gives a ~~slight~~ ^{a faint} indication of Cl on adding H_2SO_4

The sol in H_2SO_4 gives an abundant white ppt with



The ppt is soluble in NH_4Cl

July 23rd 1879

Lamps for machines

No 2 14 A. 10 M. Requires a magnet with a hollow
core $2\frac{1}{8}$ long. Hole $\frac{1}{2}$ inch in diameter. ^{Outside} Diameter
of core

3 layers No 12 (W. & Moore Gauge) on each leg (33 Coils
on each leg)

Distance of legs apart, from center to center
 $2\frac{1}{2}$ ins.

Yoke plate of cast iron

Tips for simple light on this machine
are $\frac{1}{2}$ long (Cone of 90° not included)
Diameter of tip.

No 1 Simple light

16 A. 11 M.

Magnet core $2\frac{1}{8}$ long, outer diameter
Diameter of hole $\frac{9}{16}$

Distance of legs apart (from center to center)
inches

3 layers No 12 (W. & Moore Gauge) on each leg
11 Coils on each layer

The tip is $\frac{1}{2}$ long and the cylinder is
terminated by a cone of 90° .

Laboratory in M + E R R Ave Shop.

Newark Aug 30th 1880.

Danroffs Gas Lighting & Extinguishing
System.

Salem, Mass. 10016

Longest Circuit 11000 feet No 12. Dvd. Lamp
(= .08. inch). 26 Lamps

The second circuit is 7500 feet with 24 Lamps
wire as before

The third circuit is 5800 feet with 25
Lamps. wire as before ~~25 lamps~~.

Res of $\frac{1}{2}$ of leading wire (Copper No 12 A. G.)
= .00161584066 Cals.

Res of First Circuit (without helices & plate
wire) = 1.777424815.

Second Circuit	do	10	12.118804875
Third	"	"	9.37187071

18 Ohms
7

Cost of laying wire underground (at Salem, Mass.)
given by Mr. Dausoft.

Drick live masts cobbles stone gutters +
maced anises sheet crossings. Wire buried from
10 to 22" from surface. Wire laid ^{about equally} under
~~side~~ cobbles stone ~~drinks~~. Absolute cost 293.6¢
per mile of 12x6 Bishop Compound Copper wire.
Cost of labor \$84 per mile.

Newark N. J.
April 7th 1884

This series of notes commenced on next page

Newark April 6th 1888

August 16th 1881

Cincinnati Electric Light Company (for Cincinnati
Exposition)

Incandescent Lamp Circuit = 2400 ft (ring)

1st Incandescent Lamp Machine
to run 50 fifty other lamps