

Frank Dawson Bliley's
Journal/Album
1920-1921

F. Dawson Bliley
8th Grade
Whittier School.

~~1802 Grove St.
Boulder Colo.~~

~~after June 1st 1921
450 West 9th St.
Cris, Penna.~~

LOOSE **IP** LEAF
STUDENT'S NOTE BOOK

PATENTED Dec. 20, 1904
Dec. 12, 1905

No. 8058

IRVING-PITT MFG. CO.
KANSAS CITY, MO.

Bo 7 bs
E. R. — ER 508521

Marcini — A 200088

Cond. T. — 1112

GE — CG 1144
513

GE — CG 1144
649

~~9 A X T~~

~~8 a g r~~

8 A.G.R.

0505
3388

parents

FRANK DAWSON BLILEY'S JOURNAL & PHOTO ALBUM 1920 (14 Yrs) –1921 (15 Yrs)

Container: Two-ring binder
Size: 8-1/2 x 5-1/2 Inches, Approximately
Cover: Black, cloth texture
Paper: Light grey

BACKGROUND

The Bliley family moved to Boulder, Colorado around 1920 to aide in the recovery of Dawson's father, Frank Anderson Bliley, whom they thought had tuberculosis. That turned out not to be true, and the family returned to their hometown of Erie, Pennsylvania, apparently in June 1921. The moved into a duplex home at 450 West 9th Street, Erie, Pennsylvania.

Most of the content is from his very early years activity in ham radio and how he made money doing odd jobs and a newspaper route. The newspaper account was located in the first part of the journal, but it certainly was from the later period when he lived in Erie, based on the street address of his customers. I certainly would have expected his ham radio notes to be first as they represented the more exciting activity in his young life.

He delivered newspapers, cut grass and did odd jobs for a wage. He even noted being paid 16 cents to help out a stranger get gasoline. Apparently, ever penny counted. The account grew to over fifty dollars of which he "banked" eight in his father's wallet.

His boyhood entrepreneurship and technology interests were the foundation of his interest in becoming a radio engineer and later founding a manufacturing company based on his ham radio hobby at the age of 24.

Notations reflect the investment of some of these earnings in radio equipment and Christmas presents.

HAM RADIO CONTENT

Dawson was an early adopter of the new hobby of amateur radio, which was just 14 years old in April of 1920. Ham radio was then the equivalent of the public gaining access to the Internet in the 1980s. It was an exciting world with seemingly endless possibilities. Early operation was uncontrolled by national governments. Amateur radio was permitted on a non-interfering basis on what was considered a wasteland above 1,500 kHz. The hams soon learned that much longer communications could be realized the higher in frequency they went, albeit less predictable. There were book and magazine articles being written about the excitement of radio communication and the adventures of young practitioners, such as "Radio Boys". Many of these

characters were the superheroes of the day and most readers fantasized about being just like them.

He first operated as a listener and as an unlicensed operator. Two way contacts were a challenge. Operators often logged signals of stations they heard and sent in these lists to radio magazines to let the stations know they were being heard further than they could receive stations in return. In Dawson's journal, you will find several such lists at his stations in Erie and Boulder. One of them is typed; no doubt, this was created on the machine at his father's law office about five blocks from the family home. The lists include stations that were located many hundreds miles, and several a thousand miles away.

It was a practice of ham radio operators to ritually exchange descriptions of their station equipment and comment on its merit. In this way, you could learn from other operator's successes and failures, and consider an adjustment to your own station to improve its effectiveness.

There are several pages of detailed descriptions of his stations, and a few photos. The photos lack quality, but they reflect his interest and pride in his hobby.

The station callsign, 8AGR, credited on the back as 1920, is a callsign from the Eight amateur radio district of the time. It was later subdivided with Erie being assigned to the Third district. This would suggest the family was in Erie when he was first licensed. His callsign in Boulder appears to be 9AXT as Boulder was located in the Ninth District.

A loose photo of his station, 8AGR dated 1920, was found in the journal as well as a technical description of this station in Erie, PA. The receiver equipment is located on the left and the transmitter to the right.

The back cover lists callsigns of stations he send cards confirming two-way radio contact. These cards are referred to as "QSL" or acknowledgment cards and certify contacts for awards or just bragging rights. These were often mere blank postal cards with vital information relating to the contact. Some included graphics drawn by the operator and others were commercially printed with personal graphics or on the back of off-the-shelf photo post cards. This practice is still being used in 2016, albeit at a less frequent level with the advent of computer generated contact confirmations.

MISCELLANEOUS NOTES

Dates

It would appear this journal was started in based on the entry inside the front cover that the family was moving in June of 1921. The exact date of arrival in Boulder is unknown at the time of this writing.

- February 9, 1921
- June 1, 1921
- Dec. 13, 1926

“Bulbs”—Inside Front Cover

On the bottom right side of the inside of the front cover is a list of “bulbs”. These are vacuum tubes and are listed by brand names: Edison Radio, Marconi Radio, and General Electric. One or more of these may have been used in his vacuum tubed transmitters and receivers. The GE CG-1144 was a popular tube for airplane radios. There is little doubt, Dawson experimented with several designs presented in hand-drawn sketches and blueprints.

“Whittier School —Eight Grade”— Front Cover Inscription

While in Boulder, it appears Dawson attended the eight grade at the Whittier School, a public school, about one-half mile away—a short 15-minute walk.

Profile from the Web,

Built in 1882, Whittier is a designated Historic Landmark, Colorado’s oldest continuously operating school. The original Pine Street School was renamed for poet John Greenleaf Whittier, after he wrote back to student Effie Titus, an early Boulder 6th grader, who was in love with his poem, “Snowbound.”



Whittier School, Boulder, Colorado, C1900 (L) and 2016 (R)

Charles A. Bliley
March 28, 2016

#####

SPARDS
Sent cards
TO

81Q
3QH
9A1Q
900
8ARD
9FSS
9WE

with 9 ml pen
- red fm 9HM

$$\begin{array}{r} 30 \\ 35 \\ \hline 85 \end{array}$$

Accounts

#

28.00	-	July 12 sum
11.00	-	left in boxes
.85	-	work this week
- .80	-	spent
<hr/>		
39.35	-	sum
- .50	-	on cards - 8th
<hr/>		
38.85		
1.50		B at chgd
<hr/>		
37.35		
- 1.75	-	ailed & instel.
<hr/>		
35.60		stamp 8yr
.85	-	
<hr/>		
34.75		
- .40	-	gross sum
<hr/>		
35.15	-	total
		(over)

35.15 - ~~total~~
 .92 - int. on 415.50
36.07 - ~~total~~
 25 - Lawn A
 15 - " B

36.47
 25 - " a
 15 - " b
 20 - " c

37.07 Total
 1 # candy - 8-3

37.257
 1.55 - R - a
 + 2.55 - R - B
 37.625 - R - C
~~1.50~~

3
 Next

3 7.62 - Total
50 - left from pay

27 - I-B
02 - I-C
3 8.58

17 - total of I-A

3 8.68
1154 - P. route

4 0.22
1.25 - Papers - etc.

40.37
1.50 L. B
25 L. C

4 0.77 total
25 - lamp curtains

4 1.02
25 - Res. to Win.

4 1.27
1.00 Paper route a. 2.2

42.77

~~42.77~~ ~~42.77~~
42.77 - Papers - wk 9 15

43.29
.05 work of M. Laven

43.34 - L - B
15 - L - C
25

43.74 - L - C
25

~~44.00~~ Papers wk 9 22
90

25 - L - A
15 - L - B
25 - L - C

45.55 - minus .50 for book

45.00 - BW 27
90
4590 - ok

45.90 - Total
.15 - detector to Wimp.

46.05

1.50 Paper work-offic @ \$3

1.30 " " " \$\$\$

49.05

1.50 - Paper work-offic - Q/d

82 - I for A5

\$ 51.37

25 - L - C

51.62

25 - L - A

15 - L - B

\$ 52.02

25 L - A

15 L - B

25 L - C

\$ 52.67

117 I Sept 12

5384

53.84

1.50

Pay office rts 5.12

55.34

.80 wrk for Mrs. Hamel ^{dell. paper}

56.14

5.00 spent into socket Sept 20

51.14

15.00 - 2-50 W. tubes G.E. Sept 20.

36.14

1.50 - paper route office. ^{weekly} Sept. 19

1.32 - lunch Sept 19

.28 - L-A

39.21 - Total

1.50 Paper to Oct. 1

1.37 route

42.08

1.03

Ind - Oct 5

1.50

- office - pay Oct 8.

44.61

44.61 - total
5.00 red tube sockets.

49.61

17.00 - 12 + 5 for c wheels 6 av.

⊠ 32.61

25 L-D

1.50 office rite Oct 15

1.03 Ind. Oct 15

⊠ 35.39 - Total

1.50 - paper rite Oct. 22

35 - E.H. con. plates.

1.00 - blind Oct 22

2.00 - Bike fees C. House.

⊠ 40.24 - Total

12 -

⊠ 40.36
19 - for getting gas for storage

40.55

over

40.55 - total
1.19 - sund - day Oct 29.
1.50 - Paper etc - office - Oct 29

43.24 - ~~total~~
1.50 - Office - hold back - Nov 5.
1.36 - Sund - paid for by Don. Nov 5.

46.10
5.75 - paid for tubes Nov 4.

40.35
15.00 for trans.

35.35 - T
- 4.70 - Kinis Press.

30.65 - T
3.80 - sold cabinet to Hogen

34.46
5.00 - X was money

39.43
8.50 for one step

30.65
3.50 - amplaf. trans. BF

27.13

~~27.25~~

. 55 Ed. H. left telson

~~27.80~~

- 2.00 for inf. cov.

- 2.25 for telphone trans.

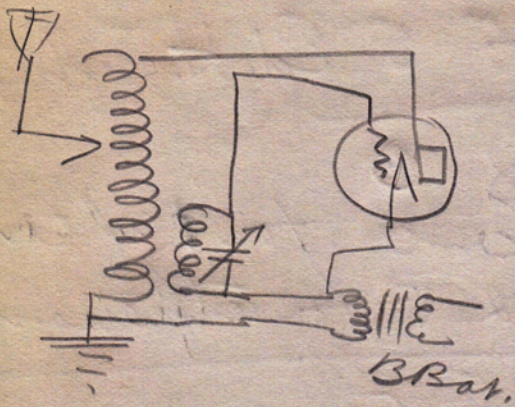
~~23.55~~

1.75 - May 3
+ 1.75 for 25 sep
ans

~~21.80~~

~~2.00 - Bah yid~~

~~22.00~~



Papers

# H	Time Time	541-W2
Times	Time	541 _{W2} --- class

~~Jobs~~ — week

Paper route	\$ 1.50
Indpt.	1.48
Lawns	.65
Errands	abt 1.50

L — Lawns

I — Independence

~~150~~
~~50~~
~~25~~
~~2.25~~
~~4~~
~~279.00~~

99
40

59

50900
99

200
262

1000

225
250

275

~~27~~
~~27~~
~~27~~
~~27~~

1000
600

400

18
~~20~~
8

275
4

1700

Tapers

	started	rate	Per. wks Pute
1 B-439 - Front	wed	A.10	18
2 A-54 W2 alley	ok	ok	18
3-546 - alley	ok	ok	18
4 C-218 short	Mon	03	18
D-363 - short	Tue	A10	18
5 D-227 - W 2	Whed	A18	18
E-B-24 w alnut	^{typo paper} Mon	A15	18
F-E-324 w 9.	wed	A10	18
7 F-450			^{sub} mon 18
8 G-215 short	Fri	A19	18
9 H-8 <u>2B</u> Chestnut	Fri	A19	18 16
10 I-204 W 8	Sat.	A20	18
11 J-123 Lass	Sat	A20	18
12 K-458-W 9	Mon	A22	18
13 L-239 short	Tue	A23	18
14 M-122-W 2	Thur	A25	18
15 O-327 Alnut	^{Herard} Mon	A19	18

Tapers

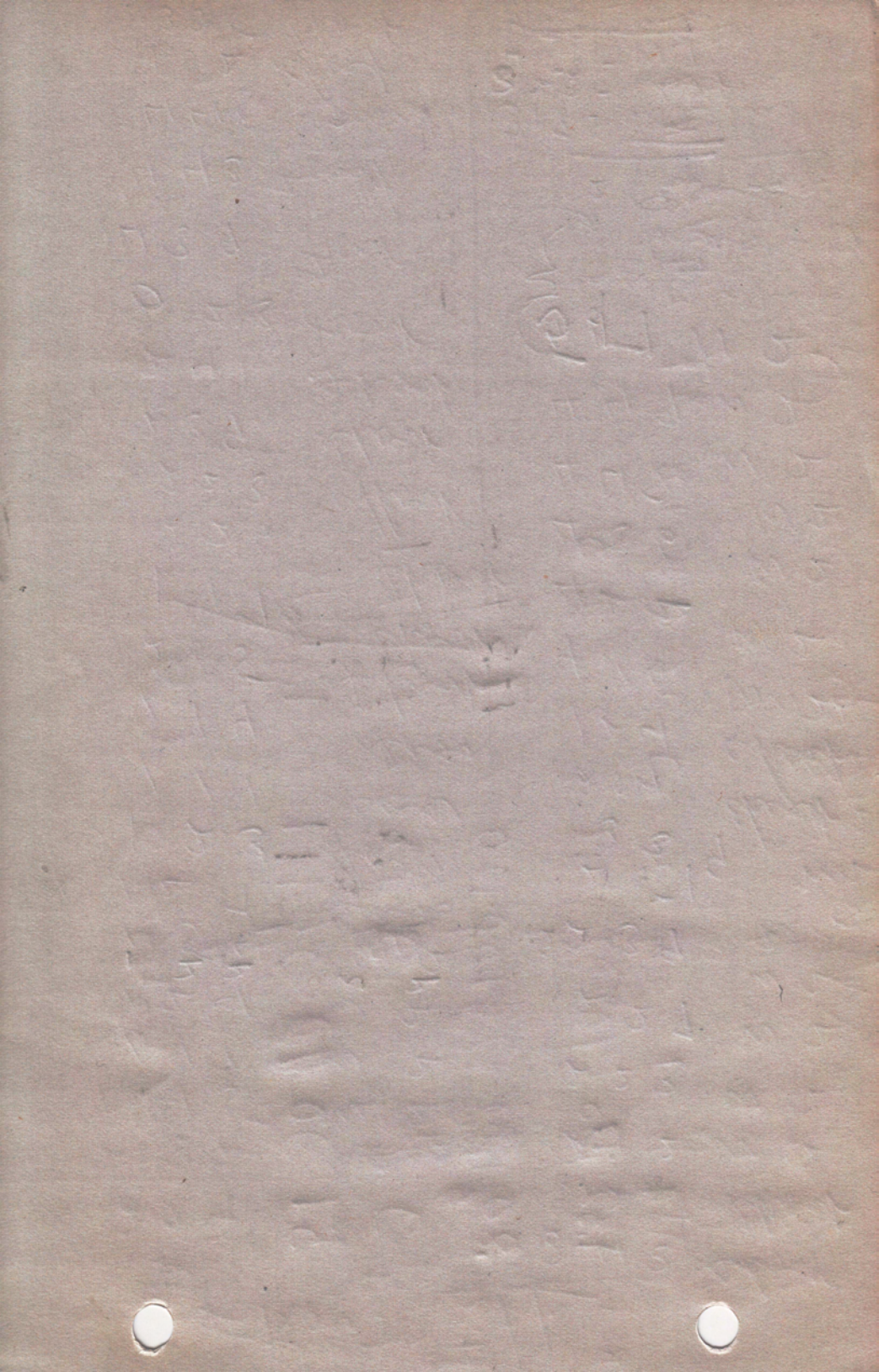
	started	site	Per. wks Puts
1 B-439 - Front	wed	A.10	18
2 A-541W2 alley	ok	ok	18
3-547 - alley	ok	ok	18
4 C-218 short	Mon.	03	18
D-363 - short	Tue	A16	18
5-D-227 - W 2	Whelan	A 18	18
E-E-324 w alnut	^{typo paper} _{mon}	A 15	18
F-E-450 w 9.	wed	A 10	18
G-215 short	Fri	A 19	^{sub} _{mon} 18
9 H-8 <u>2B</u> Chestnut	Fri	A 19	<u>16</u>
I-204 W 8	Sat.	A 20	18
11 J-123 Lass	Sat	A 20	18
12 K-458-W 9	MON	A 22	18
13 L-239 short	Tue	A 23	18
14 M-122-W 2	Thur	A 25	18
15 O-327 Alnut	Herold	A 19	18

#Route #11.

x 204 w 8
 232 ~~hass~~
 145 w 2
 111 w 2
 124 w 2
 122 w 2
 154 w 2
 * 127 ~~hass~~
 x 123 ~~hass~~
 111 ~~hass~~
 114 ~~hass~~
 205 ~~short~~
~~11 1/2 short~~
 11 1/2 ~~short~~
 226 ~~short~~
 223 ~~short~~
 x 239 ~~short~~
 241 ~~short~~
 323 ~~front~~
 x 439 ~~front~~
 443 ~~front~~
 445 ~~front~~
 102 ~~chest~~
 335 ~~short~~

343 ~~short~~
 327 ~~short~~
 212 w 2
 223 w 2
 227 w 2
 239 w 2
 2519 w 2
 339 ~~chest 2~~
 204 ~~chest 2~~
 124 ~~w 2~~
 410 w 2
 422 w 2
 436 w 2
 448 w 2
 449 w 2
 541 w 2
 3 in alley - Times
 8 Herald -
2 Papers

318 - walnut
 223 - chest
 458 - w 9
 452 - w 9
 450 - w 9



Letter A 15 22 29 55 12 19 26 0-3 10 17 24 31 N-7 14 21 28 35 12 19 26

A 30 36 36 30 36 36 34 34

B 30 18 18 15 18 18 17 17

C 15 18 03 = - - 0 17

D 18 18 15 18 18 17 17

E 18 17 18 15 18 18 17 17

F 18 18 18 24 36 36 34 34

G 09 - - - - 8

H 03 10 10 13 18 18 17 17

I - 18 18 15 18 18 17 17

J - 21 18 15 18 18 17 17

L - 15 09 15 18 18 17 17

K - 18 18 15 18 18 17 17

M - - 27 15 18 18 17 17

N - - - - - 17

O - - - - - 17

19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0			
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0				
14	13	12	11	10	9	8	7	6	5	4	3	2	1	0					
13	12	11	10	9	8	7	6	5	4	3	2	1	0						
12	11	10	9	8	7	6	5	4	3	2	1	0							
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3	2	1	0																
2	1	0																	
1	0																		
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1. ...
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7-2

W e e k s

R'ed

013.

	A-15	22	29	5-5	12	19	26	0-8	18	27	29	AB5	N-12	19
R'ed for selling papers	1.32	1.90	1.90	1.82	2.37	2.52	2.52	2.05	2.05					
Papers Cost	.80	1.00	1.20	1.00	1.20	1.20	1.05	1.02	1.02					
Papers Bot per day	9	12	12	12	12	12	12	17	17					
Total Bot. wk	51	90	90	82	117	132	137	103	103					

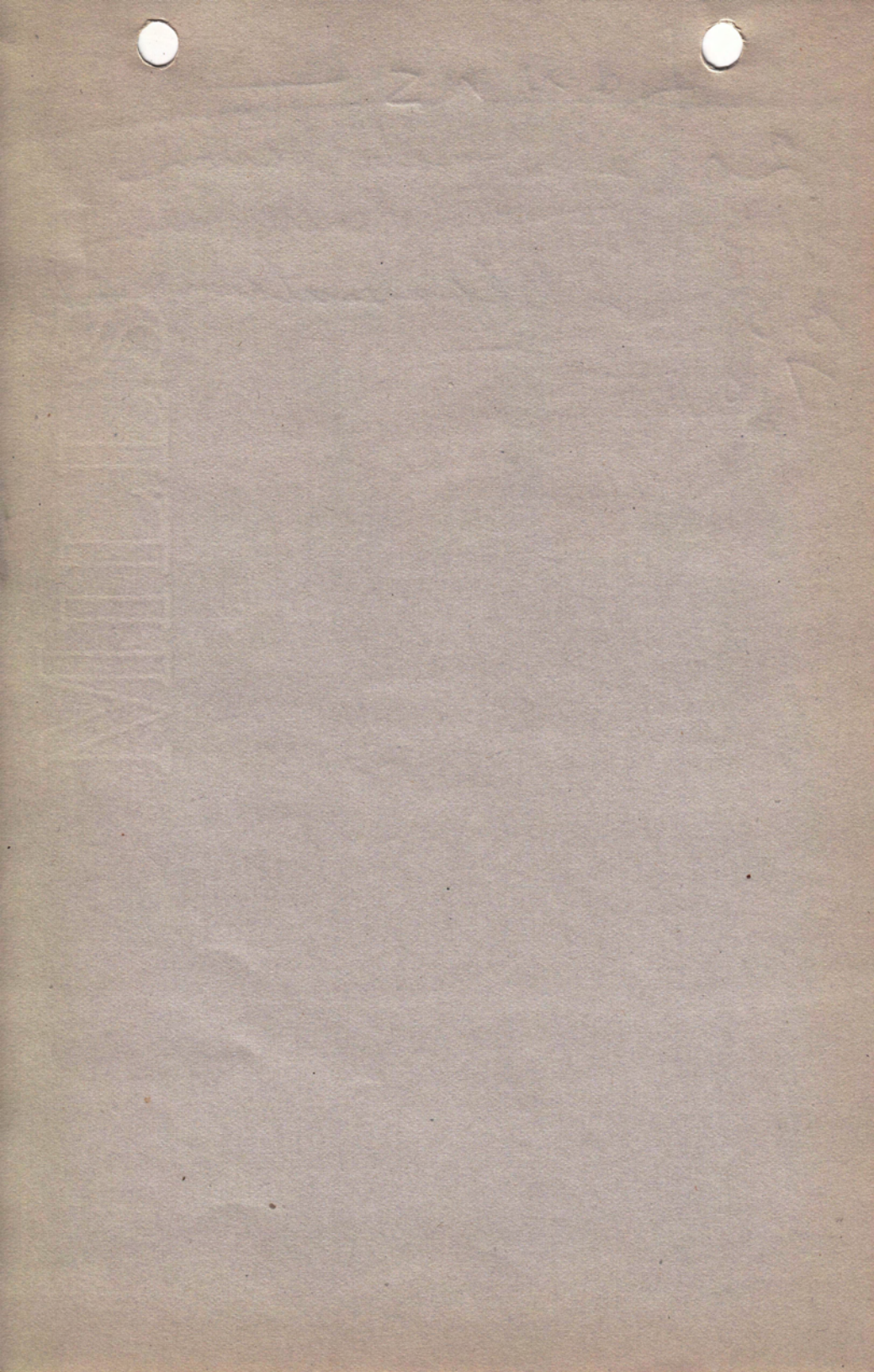


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 2097
 2098
 2099
 2100

Lawns

20	- On back lawn
15	- On front lawn
135	- Blosses lawn & with
<hr/> 70	- T



I

K

M

~~C~~

J

L

F

B

D

A

E

H

~~At~~
 Bulb - \$ 30.00
 trans - 12.00
 misc - 1.50

 43.00

~~51.37~~

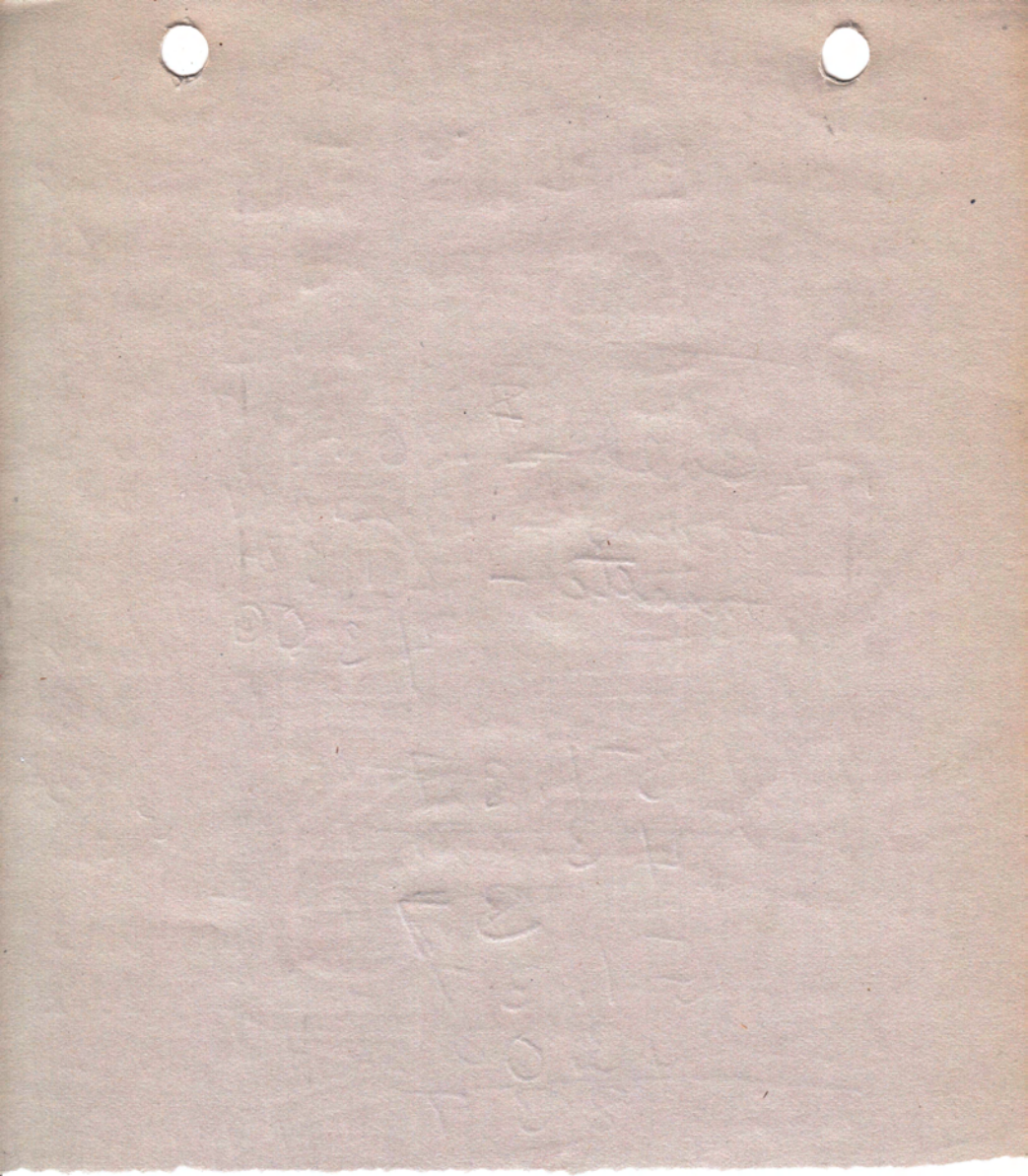
~~43.50~~

~~8~~
 51.37
 43.00

 837

1.50
 12.00
 30.00
 43.50





To T d

1.00 S. 17

- 3.
 - 2.
 1. Museum Conf.
- LIST.

HISTORY.

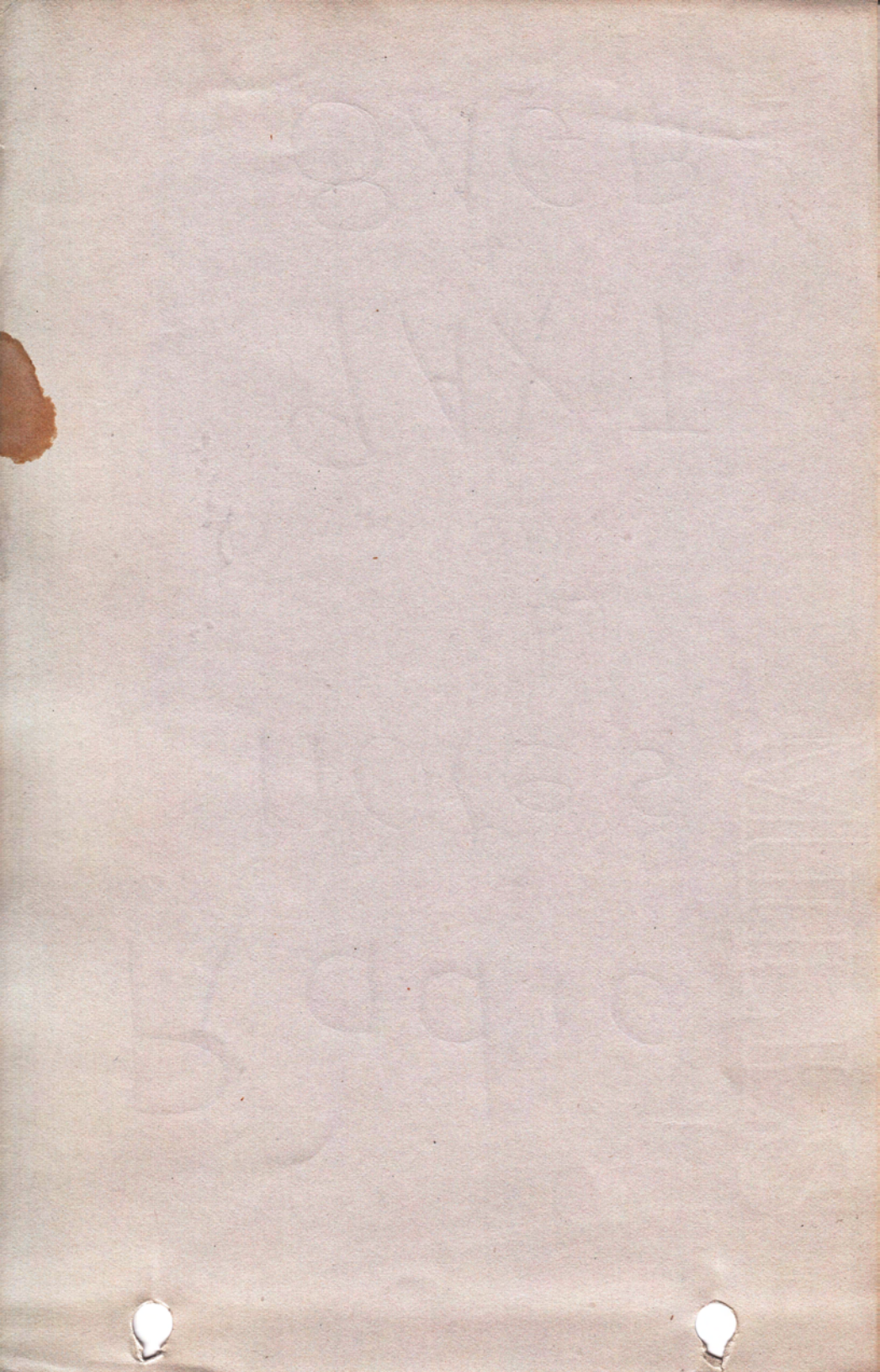
Radio
notes

by

Dawson Bliley

9AXT

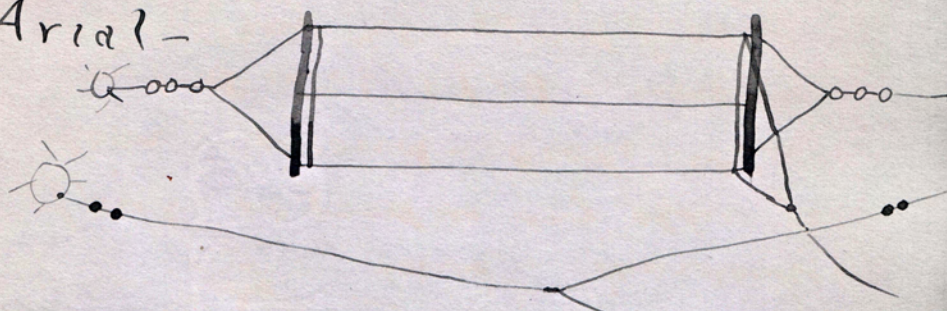
⊕
8AGR



From Sept 12
 Co. No. 6 -
 1920

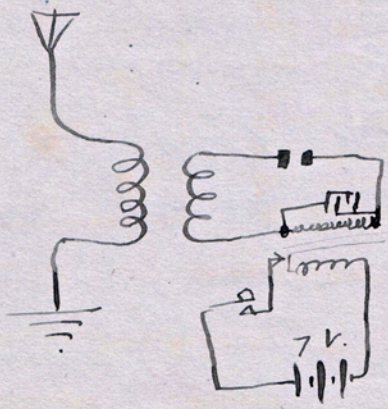
Description of - 8AGR

Aerial -



Two aeriols - sending was L aerial -
 60 ft. long and 25 ft high. lead-in
 40 ft. long - grn. 12 ft. Receiving -
 120 ft. long 25 ft high - T. aerial
 lead-in 50 ft long - grn 12 ft.

Sending - one in. spark coil
 lead-in made of 16 strands of
 #3 cotton covered. Diagram -



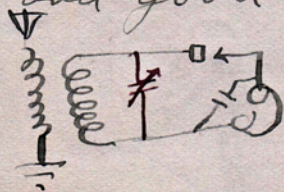
good results
 with this
 set. Later
 bought a $\frac{1}{2}$ K.W.
 set for #6 -

not such good results with this.
 used Edison Storage Bat. for #14
 for both sending and receiving.

OAGR - Con.

Receiving -

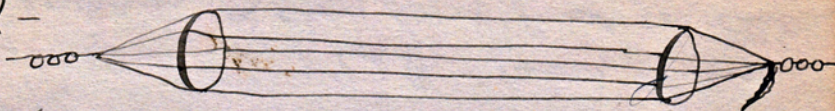
Via Erie all I heard (except hams in Erie) was commercial and those I heard from Tampa Fla to New York to Chicago and Sault St. Marie, Con. I use the Electron relay - which I find about one of the best audions. but critical adjustments plate voltage 45 V. Filament 6 V. Jones Murdock 2000 ohms - find them very good. Loose Coupler - Sears & Roebuck abt the best made for price. 3,000 meters cap. I find this receiving diagram for crystals best heard far and good with it -



To this day Nov. 6, 1920
(8492)

Boulder Colo - Description of - 9AXT

Arial -



5-8 ft. from end to end - bicycle hoops - lead-in is ten ft (10) made of 7 strands of no. 18 - bare. Ground is 10 ft and 15 ft. Arial is 20 and 30 ft high - of 2 of aluminum and 3 of copper.

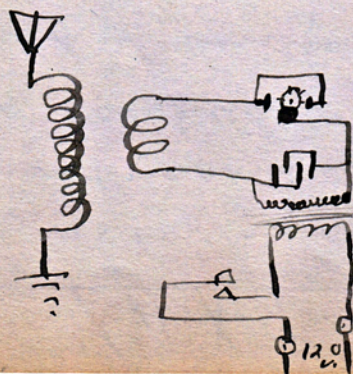
all lead-in very well insulated.

Sending - $\frac{1}{2}$ K.W. Packard Trans.

Con. 15 plates oil emersed - double tone rotary - O.T. 3 turns

Pri - 9 turns Sec. - Key 1K.W. power double layer knob - 8 No

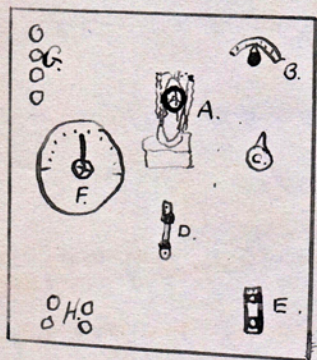
Rec. switch is small type.



O.T. abt 4 in. apart - wave about 2.00 m. Bed springs for one ground. lites flicker badly.

9AXT - cont.

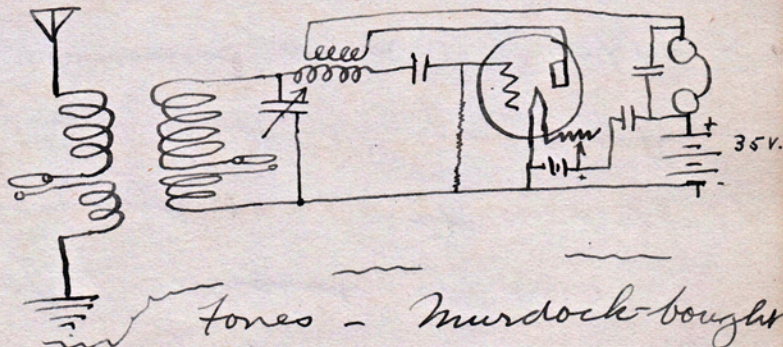
Receiving - aerial same -
ground same. Sears & Roebuck
loose coupler - all parts assembled
myself - audion panel - -



- A - Audion - hole in panel.
- B - tickler
- C - Revstat.
- D - Grid leak - not much used.
- E - fore block.
- F - Sec. V. Condenser.
- G - A. Bat. - short circuit plug.
- H - Sec. B. Bat.

Both Pri & Sec.

are tapped at abt. 250 meters.
which give better results. Dia-
gram -



Fones - Murdock bought
in April - as good as any other fones.
Audion - second - broke other in
or about Dec. 6, 1920 - now Audiotron
then Electroy Relay, find find th Electron
better. All hours come in good with this.
To this day - Feb 9, 1921 - 9AXT

States H'rd by 9AXT

Heard with audion and crystal since being in Colorado:- audion:

Washington, Kentucky, Minnesota, Utah, Arkansas, Oklahoma, - with audion and crystal:

California, Illinois, Kansas, Colorado, North Dakota, South Dakota, Nebraska, Iowa, Missouri, Indiana, Wisconsin, Texas, New Mexico.

Commercial sts. heard in Jugr before Nov. 7. in states:

Virginia, New York, Michigan, Pennsylvania, Louisiana, South Carolina, Florida, Ohio, Illinois, New Jersey, Massachusetts, Rhode Island, Canada: Ontario, Quebec.

Mileages to From Boulder, Colo.

City or town	State	Miles	Call letter
Chicago	Ill.	850	9d10-9am-etc.
Roswell	N. Mex.	550	5za-
Los Angeles	Calif.	900	6DZ-6MO
San Francisco	Calif.	975	6AZ-
Amarillo	Texas	490	5IF
Little Rock	Ark.	1060	5JD
Oklahoma City	Okl.	700	5JS
Houston	Texas	1150	5ZX
Wichita	Kan.	550	9BW-9PS-90F
St. Louis	Mo.	1070	9EG 9ZB
Denver	Colo.	28	6WR-9AYD-etc.
Lincoln	Neb.	600	9YY
Jerseville	Ill.	1065	9LG
Galesburg	Ill.	1110	9ET

Am. S.S. & Private sts. - W-call -

- W A I - Latouche
W C O - Wyandotte (Wyandotte T. Co.)
W B R - State of Ohio
W C H - Huron
W C G - Brooklyn, N.Y.
W C Y - Cape May N.J.
W C Z - Illinois
W D R - Detroit, Mich. (Ford Co.)
W E A - City of Cleveland III.
W E I - Earling
W E F - City of Detroit III.
W E L - Smith
W F A - Georgia (Goodrich Iron. Co.)
W F D - Nevada
W F Q - Arizona
W B F - Boston Mass. U.S.N.
W I I - New Brunswick N.J.
W L E - Maitland
W N I - William A. Reiss.
W O U - Oregon
W Q G - Fayette Brown
W Q P -
W S E - New York N.Y. (Babylon)
W R U -
W Q E - Harvey H. Brown
W K B - Arizonion

Con. of W-classes.

W B F -

W C I - New Part R. 2.

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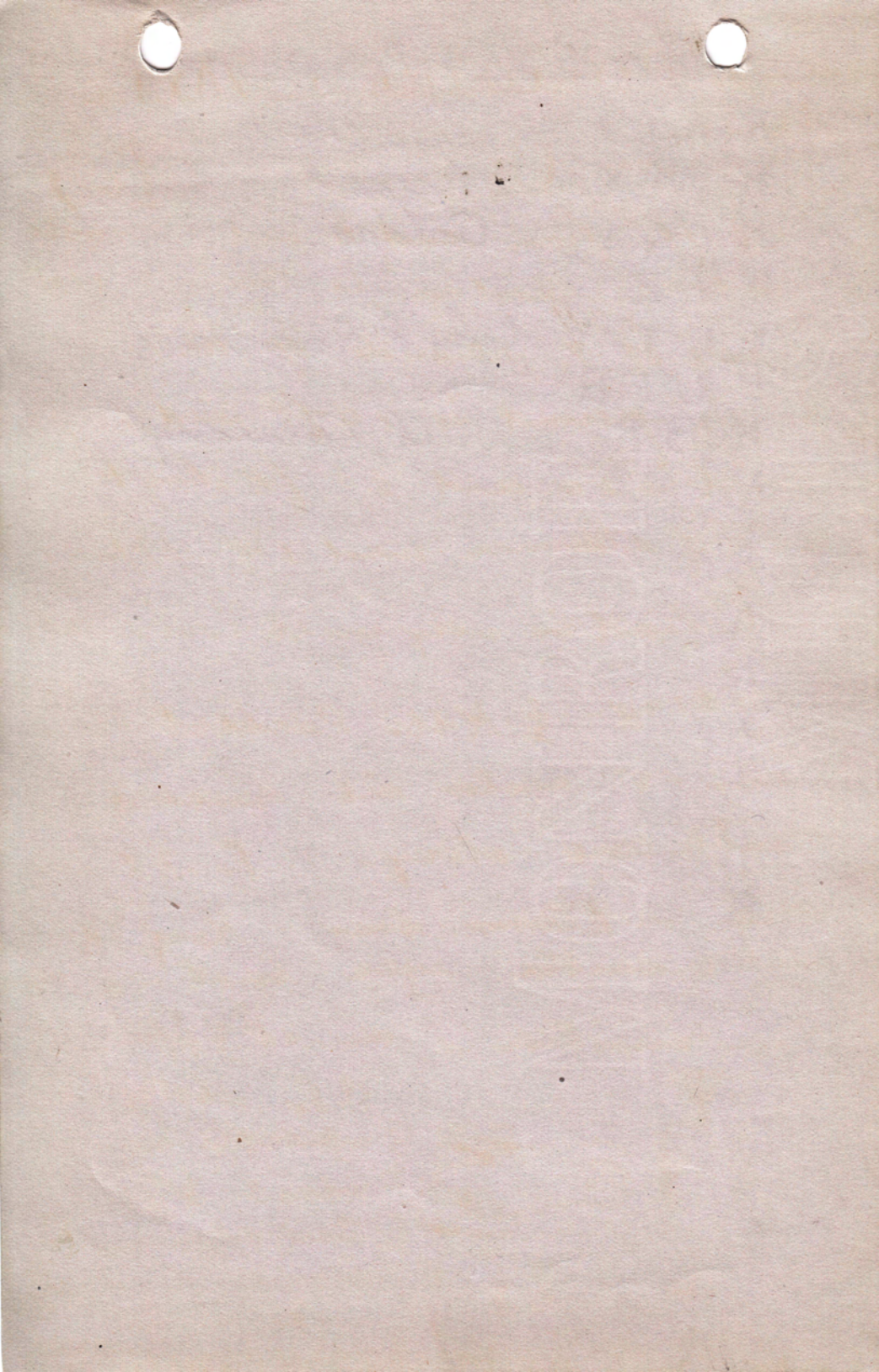
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S t s. H r d. - A m. c o m m e r c i a l.

- N A A - G r i n g t o n, V r.
N A H - N e w Y o o k, N. Y.
N A J - G r e a t L a k e s, M i c h.
N A I - P h i l a d e l p h i a, P a.
N A M - N o r f o l k V r.
N A T - N e w O r l e a n s L.
N C Z - C a p e H e n r y V r.
N E M - D e n v e r, U. S. N.
N O L - D e t r o i t M i c h.
N A O - C h a r l e s t o n S. C.
N G E - M i a m i F l a.
N G L - T a m p a F l a.
N H M - A r t i c A m. S. S.
N H R - C l e v e l a n d x O.
N N K - M a n s h a n A m. S. S.
N N Z - B u f f a l o N. Y.
N Q B - Q u e t a b u l a O.
N R H - C l e v e l a n d O.
N S D - C a p e M a y N. J.
N H S - G u l f P o r t A m. S. S.
N U R - C h i c a g o I l l.
N R W - C o m o n c h e A m. S. S.
~~N R J - O s u p e e A m. S. S.~~
N -
N -

Canadian Sts. Hrd.
SHIPS.

CGP - Sumatra
CHG -
CKG -
CKP -
CKJ -
VGE - Huronic
XVB -

Land Sts.

VBB - Sault St. Marie
VBC - Tobermory
VBD - Midland
VBE - Point Edward
VBF - Port Burwell
VBG - Toronto
VBJ - Glenlyn
VBU - Stoctacona
VGE - Huronic
V
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7" District-9AXT

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7 IX - Estes

7 MH

7 WU

Snohomish, Wash.

6" District - 9AXT

6 AN Rohrs

6 DZ Tulp

6 AH Rbeem

6

6 W v - Aurora Hospital, Aurora, Colo.

6

Albany, Cal.

Los Angeles, Cal.

Oakland, Cal.

6 " Dist

- 9KT

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Z A Kaar -

Salt Lake City, Utah

5 " District

- 9AKT

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5IF Martin

Armaullo, Tex.

5E

5JD Kinsolovina

Little Rock, Ark.

5J King (Perching radio corps)

Oklahoma City, Okla.

5

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5¹¹ Dist. - GAKT.

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5 MF

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5 SM

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5 SV

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5 Z A- Roswell, N. Mex.

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5 Z X-A.P. Daniel, 2504 Bagby St. Houston, Texas.

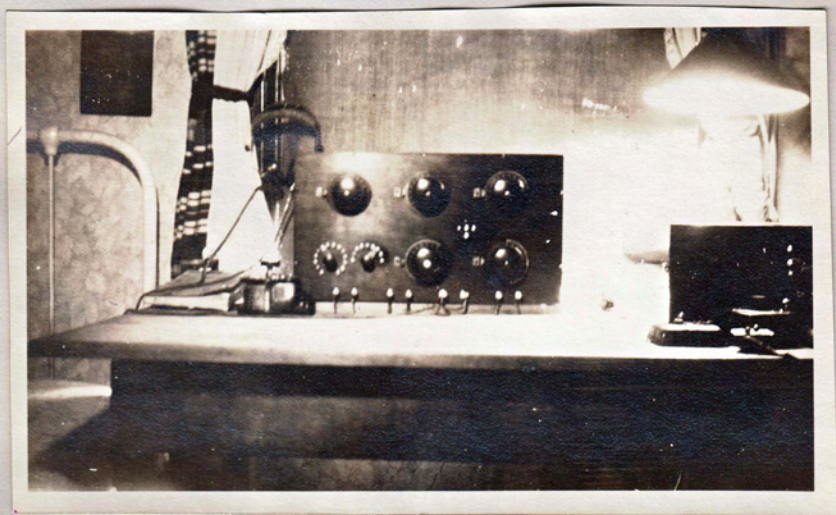
CALLS HEARD

9th District

9AAJ	Littleton, Colo.
9AC	Chicago, Ill.
9AE	Boone, Iowa
9AEG	Eldora, Kan.
9AIG	Sioux Falls, N. D.
(9AID)	Boulder, Colo.
9AII	Denver, Colo.
9AL	Chicago, Ill.
9AM	Chicago, Ill.
9AMB	Denver
9AQY	Colorado Springs, Colo.
9ALG	Wichita, Kan.
9AQW	Eureka, Ill.
9AWB	Denver
9AWD	Denver, Colo.
9AW	Chicago
(9AVS)	Denver
9AQ	Chicago
9AKR	Hastings, Neb.
9AYU	Denver
9ARJ	Housington, Kan.
9 AKC	Wood River, Ill.
9AON	Clayton, Mo.
9AUO	Wichita, Kan.
9AXU	Boone, Iowa
9ACN	Lone Tree, Iowa
9AXO	Morrison, Ill.
9DCG	<i>Poplarville, Neb.</i>
9DCY	<i>Denver</i>
9DBT	<i>Superior, Wis.</i>
9DB	Muncie, Ind.
9EE	Valley City, N. D.
9EL	Council Grove, Kan.
9EMA	-----
9EMI	-----
9EQ	St. Louis, Mo.
9FO	Denver
9GG	Hockman, Kty.
9GN	St. Louis, Mo.
9HM	St. Paul, Minn.
9HI	Topeka, Kan.
9EY	Chicago
9ET	Gallesburg, Ill.
(9IGT)	Boulder, Colo.

9ATO	Chicago
9AYV	pDenver
9JA	Marengo, Iowa.
9LR	Anthony, Kan.
9WW	Milwaukee, Wis.
9UT	Sioux Falls, S.D.
9ER	Laufayette, Ind.
9WQ	Denver
9OE	Wichita, Kan.
9PS	Wichita, Kan.
9QH	Danville, Ill.
9QW	Chicago
9QO	Lawrence, Kan.
9SU	Woodstock, Ill.
9RY	Topeka, Kan.
9YZ	-----
9WR	Kansas City, Mo.
9ZBZR	St. Louis, Mo.
9ZL	Manitowoc, Wis.
9-----	
9AH	Chicago
9AS	Chicago
9AIO	Gypsum, Colo.
9AWW	Independance, Mo.
9ATD	Denver
9AFX	Stromsburg, Neb.
9AZ	Chicago
9BW	Wichita, Kan.
9EY	Chicago
9JI	Lawrence, Kan.
9LW	Wahpeton, N.D.
9LG	Jerseyville, Ill.
9TD	Columbia, Mo.
9WU	Ellendale, N.D.
9WY	Watertown, S.D.
9YA	Iowa City, Iowa
9YW	Rapid City, S.D.
9YW	" " " "
9WY	Lincoln, Neb.
9AQX	Mulvane, Kan.

Fotographs of Sets



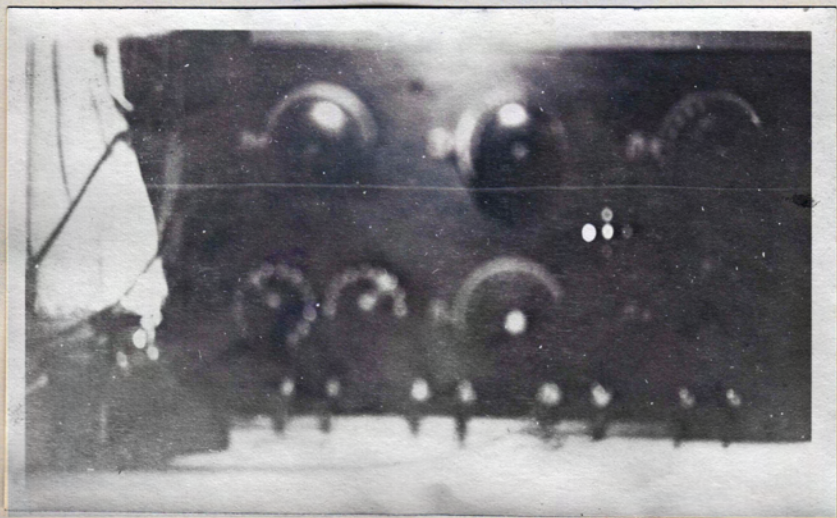
BAGR in Aug. 1921



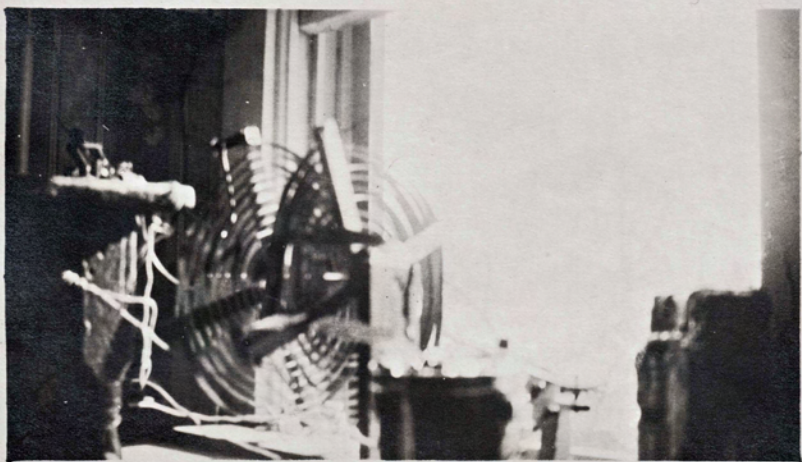
C.W. set - Aug. 1921



8 AGR - Aerial - Aug. 1921



9 AGR - REC. A. 1921

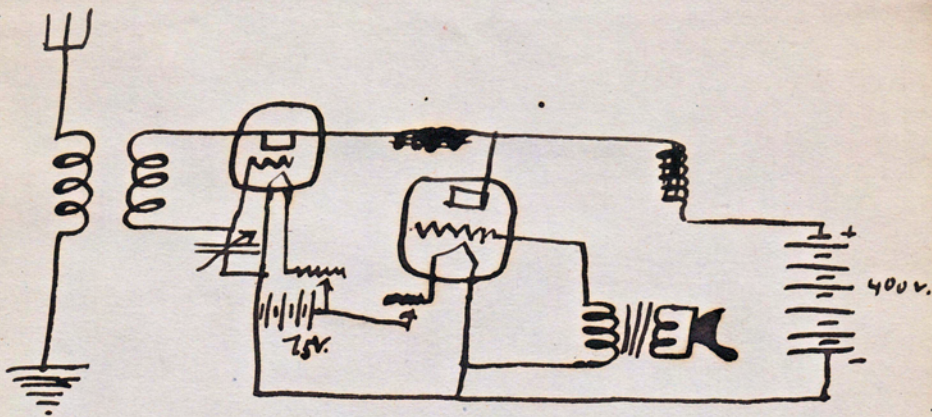


9AXT- Trans - Feb - 1921



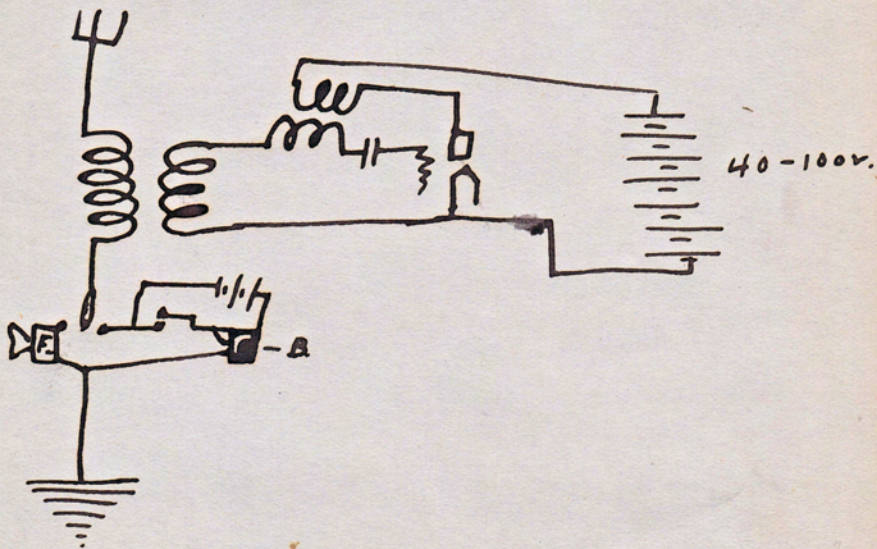
station of 9AXT

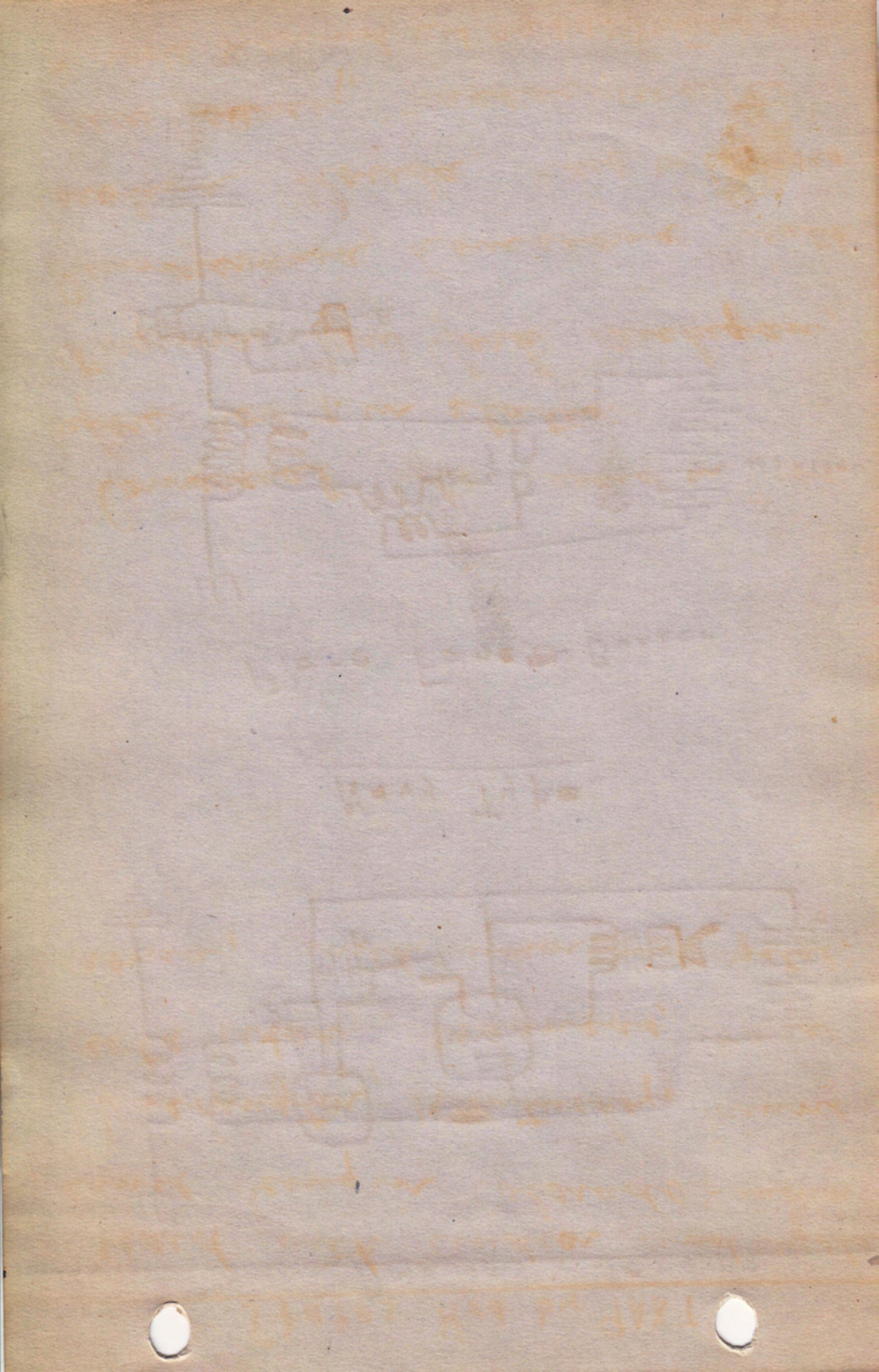
Audion Diagrams - Sending



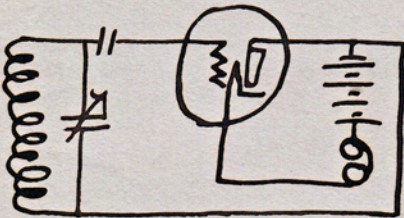
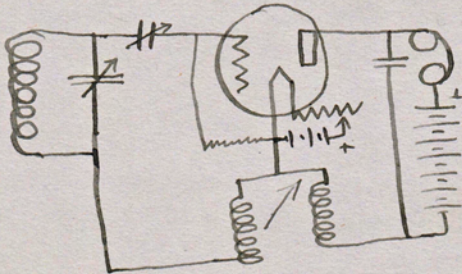
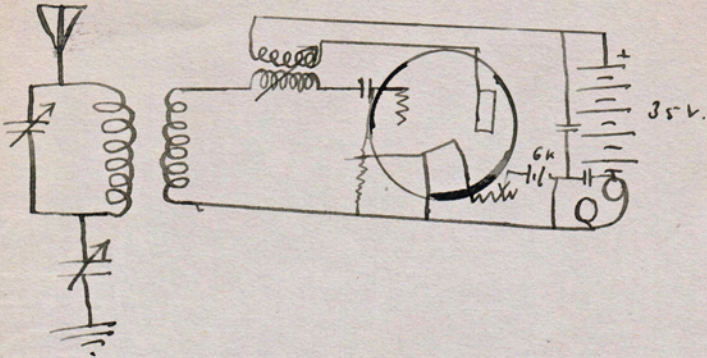
Navy Type.

Plane Fone. & Buzzer.



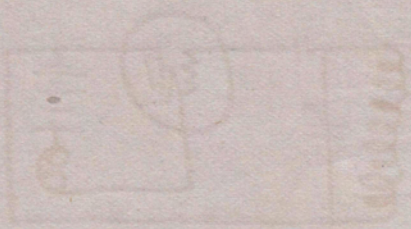


Audion Diagrams - Rec.



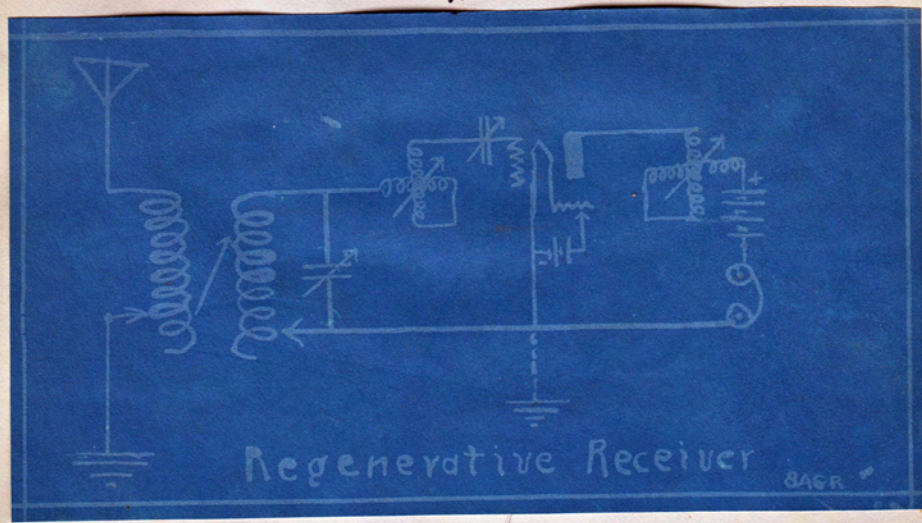


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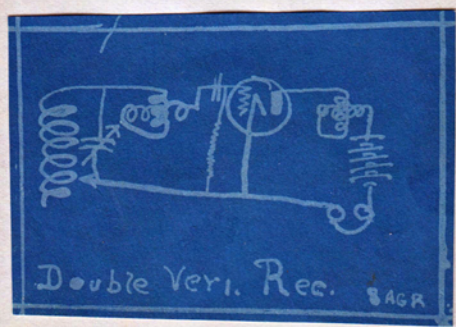


Blue-prints - Diagrams.

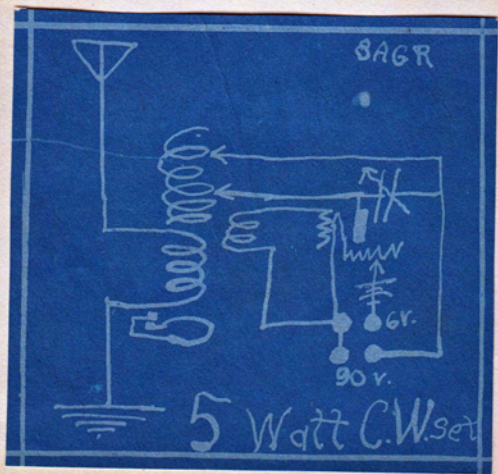
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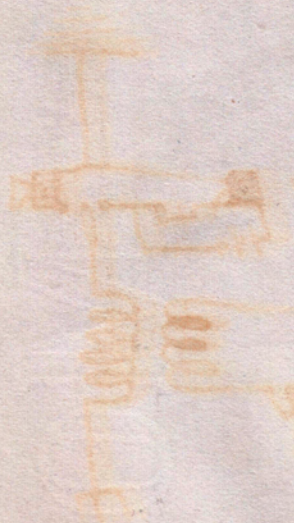


2-



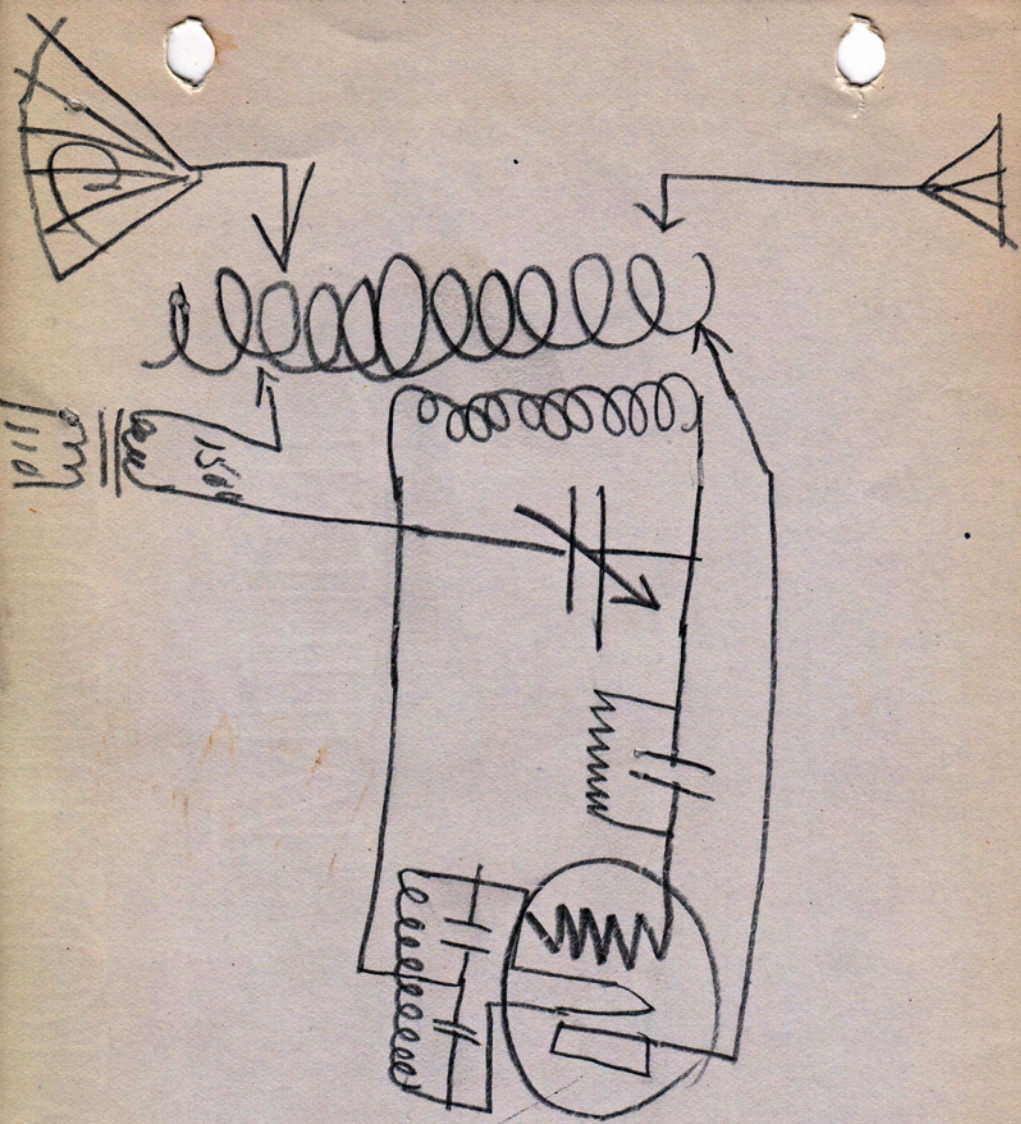
3-

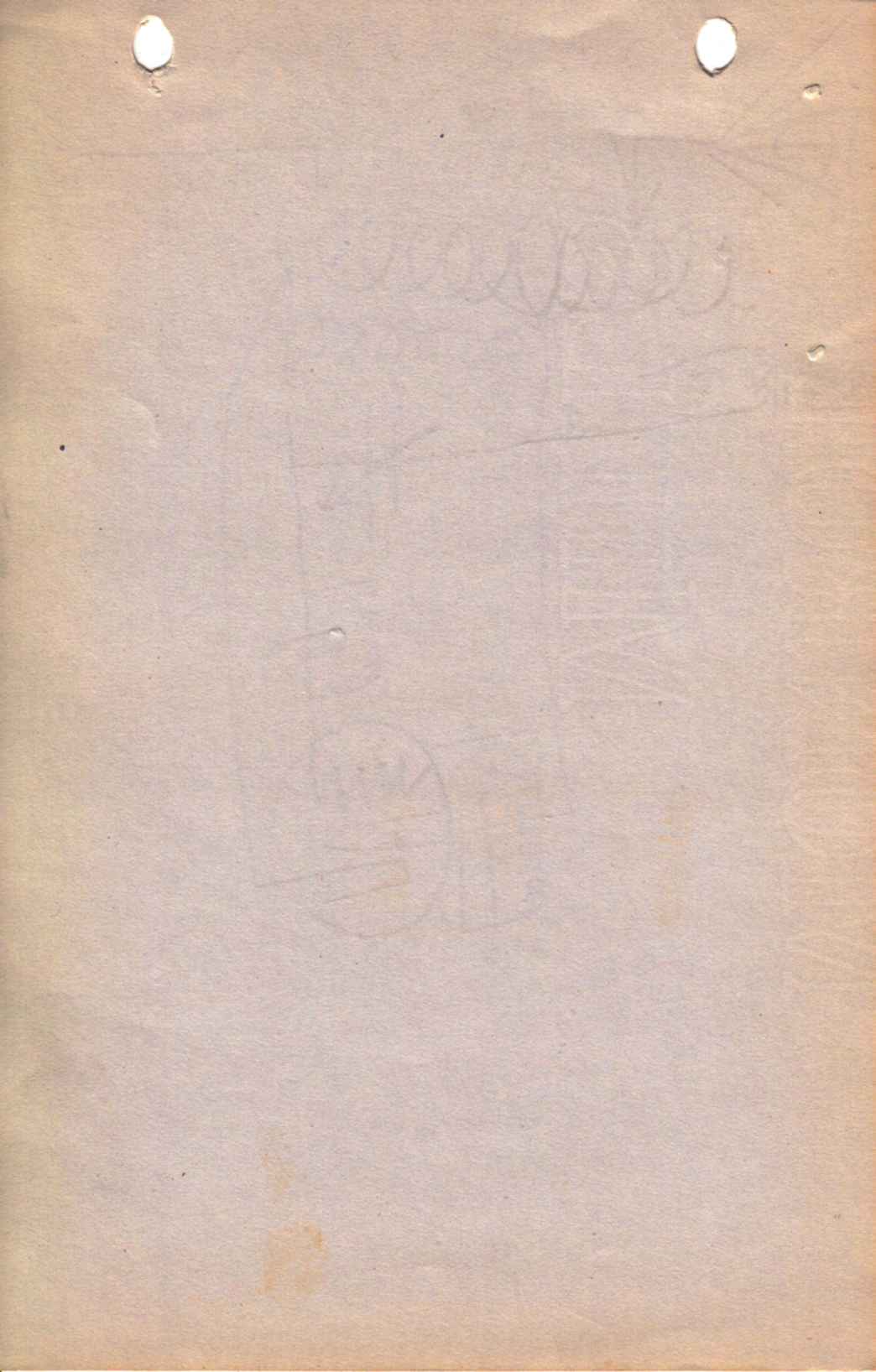


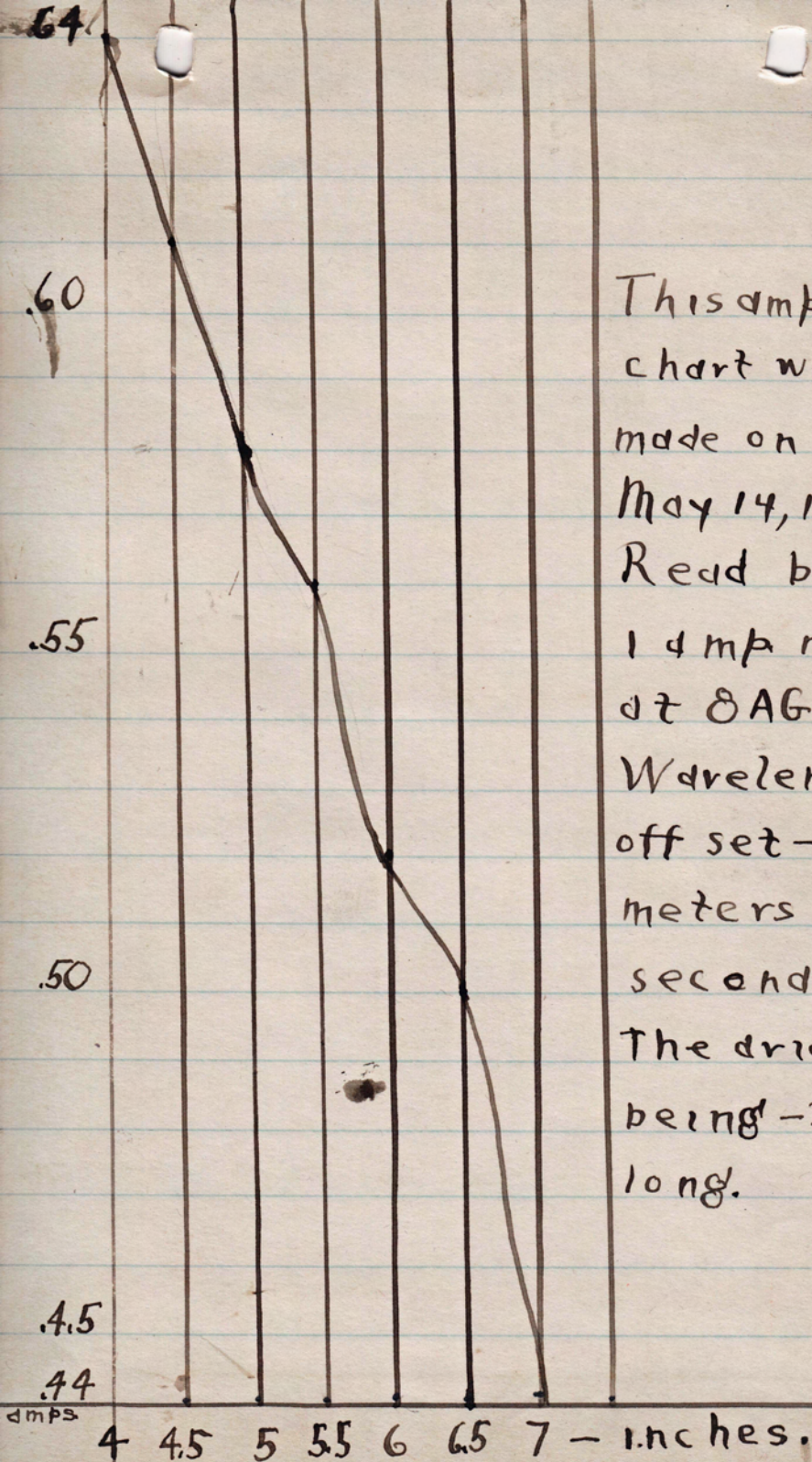


Handwritten text, possibly a label or title, located in the center of the page. The text is illegible due to fading.









This amperage chart was made on Sat. May 14, 1921. Read by a 1 amp meter, at 8 AGR. Wavelength off set - 140 meters in the secondary. The dial only being - 20 ft. long.

Resistances of Wire

size. Ohms per 1000 Ft.

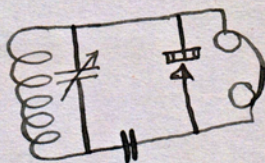
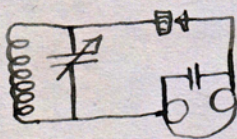
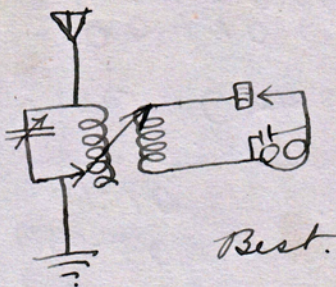
1	-	-	.12404
2	-	-	.15640
4	-	-	.24869
6	-	-	.39546
8	-	-	.62881
10	-	-	1.00000
12	-	-	1.58980
14	-	-	2.5278
16	-	-	4.0191
18	-	-	6.3911
20	-	-	10.1630
22	-	-	16.152
24	-	-	25.695
26	-	-	40.868
28	-	-	64.966
30	-	-	103.300
32	-	-	164.26
34	-	-	261.23
36	-	-	415.24
38	-	-	660.36
40	-	-	1,049.70

B 18 Wire - Ohms per 1000 Ft.

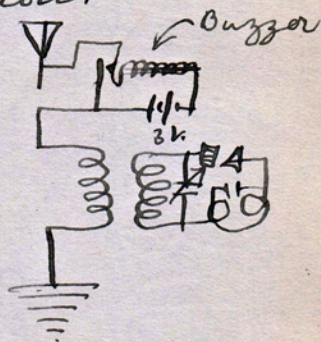
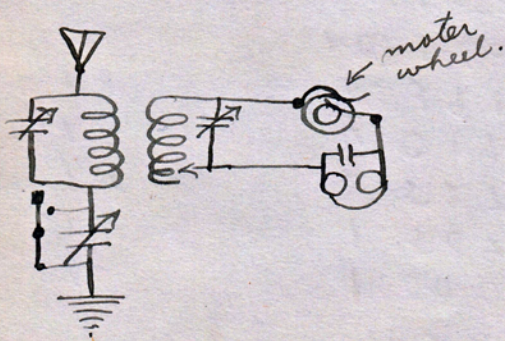
0000	-	-	0.04906
000	-	-	0.06186
00	-	-	0.07801
0	-	-	0.09838

Receiving Diagrams

Crystal-



Detector for undampd waves -
without an audion.



Resistances of Wire

Size

1

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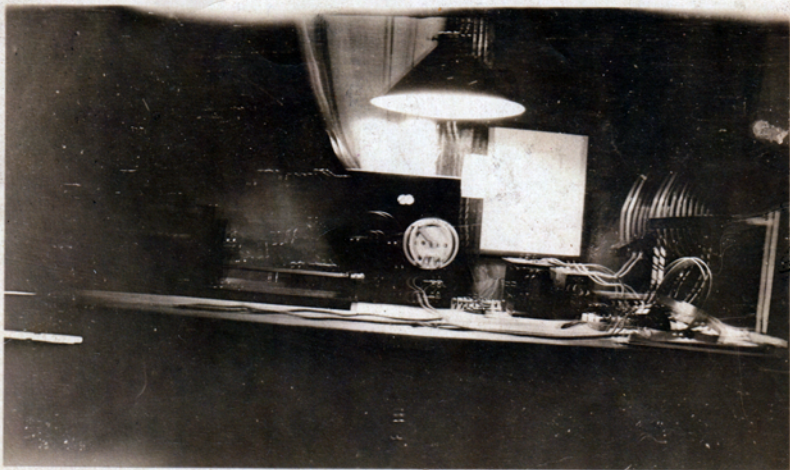
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1

Audion Diagrams.



AUG 1920

abt aug. 1920

$2\frac{1}{2} \times 4$ page

x-act

30

1920 Amateur Radio Station 8AGR
of Frank Dawson Bliley
Erie, Pennsylvania

Photo found in 1920-1925 Journal

F. Dawson Bliley
8th Grade

Whittier School.

~~1802 Grove St.
Boulder Colo.~~

~~after June 1st 1921
450 West 9th St.
 Erie, Penna.~~

LOOSE **IP** LEAF

STUDENT'S NOTE BOOK **Bolbs**

PATENTED [Dec. 20, 1904
Dec. 12, 1905]

No. 8058

IRVING-PITT MFG. CO.
KANSAS CITY, MO.

E. R. — ER 508521

Marcini — A 200088

Andiv. T. — 1112

GE — CG 1144

513

GE — CG 1144

649

9 A X T

8 a g r

8 A. G. R.

Sent cards

To -

81Q

3QH

9A1Q - rec'd from 9HM

9UU

8ARD

9FS

9NE