

for the manager of the Cincinnati office. He was brought to the office and several messages were exchanged, the contents of which, of course, I did not know, but the matter appeared to be very serious as they were afraid of General Hood of the Confederate Army who was then attempting to march on Nashville; and it was very important that this cipher of about 1200 words or so should be got through immediately to General Thomas. I kept on calling up to 12 or 1 o'clock but no Louisville. About 1 o'clock the operator at the Indianapolis office got hold of an operator on a wire which ran from Indianapolis to Louisville along the railroad, who happened to come into his office. He arranged with this operator to get a relay of horses, and the message was sent through Indianapolis to this operator who had engaged horses to carry the dispatches to Louisville and find out the trouble, and get the dispatches through without delay to General Thomas. In those days the telegraph fraternity was rather demoralized, and discipline was very lax. It was found out a couple of days afterwards that there were three night operators at Louisville. One of them had gone over ~~the~~^a to^b Jeffersonville and had fallen off a horse and broken his leg and was in a hospital. By a remarkable coincidence another of the men had been stabbed in a keno room and was also in hospital, while the third operator had gone to Cynthiana to see a man hung and had got left by the train!

TD (transcript), NjWOE, Meadowcroft. ^aCancellation in pencil. ^bInterlined above in pencil.

D. BOOK NO. 2

This undated notebook, labeled "Book No. 2," contains a mix of narrative passages, questions, and notes in Edison's hand. The first two pages are a memo by Meadowcroft, dated 9 January 1920, recounting the preparation and use made of this material between 1907 and 1910. The next sixty-six pages alternately present narrative passages and brief references to various anecdotes, most of which relate to the period covered by this volume. The next nine-page section is labeled "Martin's Questions." The remaining twenty-one pages contain only notes, all of which, with the exception of a few lines transcribed below, relate to events that occurred after June 1873.

[1] Notes

[2] (—Dyer my wife says I am related to Perry of Battle Lake Erie fame)

[3] On my maternal side one of ancestors was Capt Ebenezer Elliott who fought in the Continental Army in the Revolutionary War =

[4] Cousin Commadore Perry.

[5] On my fathers side ancestors came from Holland— They were millers of grain on the Zuyder Zee in that Country— They landed at Elizabethport NJ & settled near or at Caldwell NJ. My grandfather was a Tory in the war of the revolution & had to flee to Nova Scotia losing all his property at Caldwell. He settled at Digby Nova Scotia where my father was born in 1803. My great grand father was a banker on Manhattan Island & his name is signed to Continental money

[6] (I have a bill at house with his sig)

[7] My grandfather moved to Vienna Canada. My father wsettled at Milan Ohio where he became a buyer of wheat

[8] When I was 5 years of age I was taken by my Father & mother on a visit to Vienna. We left Milan & was driven by carriage to a Railroad then to a port on the Lake Erie & thence by a Canal boat in a tow of several to Port Burril Canada from where we drove to Vienna—

[9] I remember my grandfather very perfectly when he was 102 years of age at which age he died— [We?]In the middle of the day he sat under a large tree in front of the house facing a well travelled road. his head was covered with completely with a large amount of very white hair and (he chewed tobacco incessantly.) (Dont call for this) & nodded to friends as they passed by—he used a very large cane & walked from his chair to the house resenting any assistance. I viewed him from a distance & never could be got near very close to him—

[10] MI remember some large pipes & especially a Molasses jug which a truekrunk & several other things which came from Holland—

[11] My great grand father reached the age of 104.

[12] My father had several brothers all of which reached the age of 90 or more my father died at the age of 94—

[15] Louisville—

[16] Louisville office. Billy Lewis—

[17] Tyler & Geo D Prentice— speech 3 am— pasting up jokes from all over us for day opr Mixer me took from main & mixer abusing him on another wire^b

[18] Treasurer of night gang— new man, hit me 2nd time at Lvl

[19] Two oprs tramps went my^c bed boots on Had printing office— took A Johnson veto Dist Col bill & presidents message same day— press gave me dinner

[20] North Amer review auction shot at by police 2nd time at Lvl

[21] Room of over Lager beer saloon. machine shop— Boyd—^c Shorthand man read notes Andy Johnson speech swing around circle Full whiskey— guessed at half of it.

[22] First drank Corn whisky

[23] Got into ~~Lvl~~ Louisville from Memphis where dischg'd for putting in Repeater NY & NO together. Foley couldn't get job I got one & after 2 days was put on press report Arrived Linen duster & Army shoes Ice in streets

[24] Left for NO— to go on c[h²]arter ship to Brazil—^d arrived [----] vessell seized advised by old man not to go back home—

[25] Memphis—

[26] Confiscated bldg— slept on floor Drunken Opr came in one night got 4 bottles ink & poured it all over evrything

[27] Next night came in & kept throwing catridges in the fire grate.

[28] Midnight Lunch Faro bank—

[29] Keno in church man in pulpit

[30] Manager in confinement. signalled & friends got him out.

[31] Confederate stationary Capitals each sheet.

[33] Sholes, GKorty = operat

[34] Repeater invented putting NY & NO in communication 1st after war— Manager had a pet supt trying do same thing I beat him Noticed in Memphis appeal—got dischg'd

[35] Louisville.

[36] [-----] 2nd time at Lvl in New office— Report on blind Point repeater— bad cable over Ohio River— 4 relays 4 sounders spilt acid— eat book up sdischarged—

[37] Went to newspaper ofs got exchanges Cut jokes & scientific items scrap book lost both— Newspaper man kind as I paragraphed late news to end even on takes

[39] Cincinnati

[40] IWorked comcl wire Di cipher Oprs gone at Lvl— etc—

[41] Then put on press wire—

[42] Working on Duplex

[43] John Morgan guerella opr— Geo R Ellsworth—^e Secret way sending messages Shop in ofs building— slept there— Cooked got run down—

[44] Presdt Lincoln message to all mayors— did know about it—

[45] Formation Union took press got promoted— worked free to learn quick considered crazy^f

[46] Savings bank Lvl Cin NY Boston Copied plays for Theatre Gilliland send I copied—

[47] Somers & I induction coil round house. nobody could touch engines—

[48] Grave yard Ft Gratiot—

[49] Notes.

[51] When boy went Sarnia see prince Wales now King Edwards— Carpets laid Expected something great Mistook Duke

Cambridge for prince— Indians in war Dress Massasgua—
got licked

[52] Published paper Pt H called Paul pry

[53] Published newspaper on Train same time had chem Lab.

[54] Had 2 stores Pt H one newspaper other vegetable—
bought most vegetables in Detroit. bot berries & butter along
RR—

[55] Walked 8 miles buy a sounder

[56] Eber B Ward 15 miles from Ridgeway in country bears

[57] Boston. Stockings on Tremont row

[58] job got by Adams ~~snow~~ putting Repeater in at Pt H &
Sarnia single cable— Ben T[-]ayes = got pass snowed in
near Coburg— Soldier & funny stories Country Inn—

[59] Met Stanton man who threw tin box in Cincinnati of
2:30 am startled us all said welcome to all he had left from
wkg on UPRR Boarding House Montreal. abstemious grub
frozen bedroom— went with Solider

[60] Arriving Boston small black satchel Blue shirt.

[61] Saw Milliken. [---]ing, seedy clothes went wk NY No
1 same night roasted on Boston specl—

[62] Hutchinson.—

[63] Coffeeman— gambling— Harvard student

[64] Ink stand Insulator Heman Grant viscous ink^s near-
ly killed me— grant spent 1/3 sal breaking pitchers boarding
house—

[65] Cockroach killer— paper got hold it had stop—

[66] Young ladies school— on Jordan Marsh bldg— I speech-
less— I never could talk to more than 4 if more present radiated
something that paralyzed my vocal cords—

[67] Hamblets place. Chas. Williams jr— making nitrogly

[68] Started private lines—

[69] Lab over stock Exchg got up printer— Nitric acid ac-
cident.

[70] Synoid Meth Church JC & agt assd press— BC OK
why not JC^h

[71] Heman grant & viscous

[72] Jerry Borst. changed letters alphabet—

[73] Haunting Cornhill old books.

[74] Boarding Adams— Adams leaves for San Fran.

[75] Breaks— shoes

[76] ~~got~~ Then got up a Duplex went to Rochester— Expmted
bet there & ny— Chump at other end couldnt understand—
staruck ny Broke. BSlept telgh ofs—

[77] SS Laws. Gold Indicator— broke down— Hired by Laws
225 month. 375 boys— Black Friday— Opr shake hands con-
grat we didnt have any mony Opr a friend men in back room
of Wm Belden— Jim Fisk etc—

[78] Laws sells out got up printer for Laws. G&S buys him out. went into to Partnership P & Ashley— gold printer— Sold out Genl Lefferts fixed it so got something & Then in automatic. Jay Gould line to Washn— Tailing stopped, EHJ— Then HCraig & Sholes— made 1st Remington typewriter over Goulds shops RR ave Newark— Roman letter— NY & Phila test.

[79] Kahns Museum

[80] Knew Bunnell night opr on Fre[n]ch Cable— Chica-
mauga junction— Capt. Van Duzer—

[81] Always saved 1 dollar for Mother—

[82] Sold bread to Norwegians— Employed extra boy— &
several boys on excursions

[83] Run train from Pt H to GTR Junct Engr & fireman
asleep— Mudy Eng— allowed to switch way^e frt for until got[-]
into depot—

[84] Stop shoot Turkeys—

[85] One week before Christmas run off track. old cars
burst open got sick Eating

[86] Corporal of the guard No 1— Mike got in jail— I pulled
Bbl over me— father got him out—

[87] 2½ years passed graveyard 12 to 1 oclock night— started
horse running pass finally stopped this & at the end it got mo-
notonous & didnt care about grave yards—

[88] Fathers Observatory— Folly that paid—

[89] Truck farming— I peddled the truck until went on
train—

[90] Jumping off train at Pt H— Sand drawn by father—

[92] Milan— Lockwoods boy & I went swim he went down
I waited then went home—

[93] barn on fire

[94] Set in bank. 1 suspender 40 sesions a day Employed 3
boys at Pt H nights to sell papers—

[95] Mac Walker apprentice proposition worked days & then
copied press till 1 to 3 am to get expert—

[96] At St[---]ratford opr run trains head on fell culvert—
string across track water between 6s— Got habit sleeping 15
min— Carter & I to Union station— W J Spicer threat send me
to stprison at Kingston Oppertune arrival 2 English swells grt
joy on part Spice— Physiological moment left for Lowe Frt sta-
tion caboose & USA— 1½ dolls weak board fell in culvert.

[97] Battle Pittsburgh Landing. Wilbur F Story 1000 pa-
pers—

[98] Telegh from James Clancy to mine sent news to Fa-
ther &

[99] got chemical appartis made Pullman shops Detroit—

[100] Alow Tried acquire habit reading several words at
once, so could read rapidly—

[131] G&Stock Co 40000 for sale pats Bank wdnt pay check—

[155] 5 shops nNewark

[173] After being discharged from Memphis for devising a repeater to permit NY & New Orleans to talk together the first after the war I went to Louisville— (recited before under questions) & obtained a job on the associated press wire = At that time the Telgh^c office operating room was in a deplorable condition. It was on the 2nd story of a delapidated building on the principal street with the battery room in the rear behind which was the office of the agt of the assoctd press—

[174] The plastering was about 1/3rd gone from the ceiling— a small stove used occasionally in the winter was connected to the chimney by a tortæuous stovepipe the office was never cleaned—

[175] The switchboard for manipulating the wires was about 24 inches square the brass connections of which were black with age & the effects of Lightning which seemed to be particularly partial to Louisville It would strike in one the wires at times with an explosion like a Cannon making that office no place for an opr with the heat disease—

[176] Arranged arround the wall were a dozen tables the ends next to the wall & about the size of those one smeets with in country hotels bedrooms for holding the bowl & pitcher for washing

[177] The copper wire connecting the instruments to the switchboard were small & apparantly were crystalized & rotten

[178] The battery room was filled with old books & messages & 100 cells of Nitric acid batteries arranged on a stand in the center of the room This stand as well as the floor was almost eaten thru by the acid

[179] At the time I took the position there was a great shortage of telegh oprs.

[180] One night at 2 am, myself and one other opr was on duty I taking press report & the other work man working the NY wire we heard a heavy tramp tramp tramp on the ricketty stairs. suddenly the door was flung open with great violence throwing it off one of its hinges There appeared one of the best operators we had who worked days & who was of a very quiet a taciturn disposition except when intoxicated. he was a great friend of the manager of the office—

[181] His eyes were blood shot & wild. one sleeve had been torn away from his coat. Without noticing either of us he went up to the stove & kicked it over. The stovepipe fell & dislocated at every joint. it was 1/2 full of exceedingly fine soot which filled the room completely this produced a momentarily respite to his labors— When the room had cleared sufficiently to see he went

around & pulled every table away from the wall & piled them on top of the the stove in the middle of the room— then he proceeded to pull the switchboard away from the wall. It was held tightly by 4 screws. he finally succeeded & when it gave way he fell with the board & striking on a table cut himself so that he soon became covered with blood. He then proceeded to the battery room & knocked all the batteries off on the floor—The Nitric acid commenced to combine with the plaster in the room below which was the Public receiving room for messages & bookkeeping. The excess acid poured through & eat up the account books

[182] After having finished everything to his satisfaction he left—

[183] I told the other operator to do nothing & we would wait & leave things just as they were until the manager came

[184] In the meantime I knew all the wires coming through to the switchboard rigged up a temporary set [-]so the NY business could be cleared up & also got the remainder of the press—

[185] At 7 o'clock the day men commenced to appear they were told to go down stairs & wait the coming of the manager at 8 o'clock he appeared walked around went into battery room & then came up to me saying Edison who did this

[186] I told [-]him Billy L came in full of soda water & invented the ruin before him—

[187] He walked back & forward about a minute then coming up to my table brot his fist down & said If Billy L ever does this again I will discharge him—

[188] It is needless to say that there were other ops that took advantage of this kind of discipline & I had many calls at night [-]after that but not with such destructive results.

[189] I remember with great satisfaction the discussions between the then celebrated journalist & poet Geo D Prentice who was at that time editor of the Louisville journal & Mr Tyler of the associated press. Prentice ~~would come~~ I believe was the father of the [---]humorous paragraphs of the American newspaper. he was a poet, highly educated & a brilliant talker = Tyler also but he was very thin & small & I do not think he weighed over 125 lbs. Tyler who was a graduate of Harvard [----] & had a very clear enunciation was a large man. After the press paper had gone to press prentice would generally come over to Tylers office & start in talking. having while in Tylers office heard them arguing on immortality of the soul etc asked permission of Mr Tyler if after going to press I might come in & listen to the conversation which I did many times after. One curious thing I never could comprehend was that Tyler had a side board with liquors & generally crackers. Prentice would pour out half a glass of what they called corn whiskey & would dip the crackers in it

& eat them Tyler took it sans food. one teaspoonful of this stuff would put me to sleep—^k

[190] It was the practice of the press oprs all over the country at that time tohat when a lull occurred to start in & send jokes or stories the day men had collected & these were copied & pasted up on the bulletin board— When Cleveland which was the originating off for press which it received from NY & sent it out simultaneously to Milwaukee Chicago Toledo Detriot Pittsburgh Columbus Dayton Cincinnati Indianapolis, Vincennes Terre Haute, St Louis & Louisville— Cleaveland would call first on Milwaukee if he had anything if so he would send it & Cleveland would repeat to all of us Thus any joke originating anywhere in that area was known the next day all over— The press men would come in & copy anything that could be published which was about 3 per cent I collected too^c quite a large scrap book but unfortunately lost it

[191] While in Louisville the 2nd time It was the practice of the night force to go off on a picnic once a week either to Jeffersonville or New Albany on these occasions I was made treasurer taking charge of the whole of the funds [possessed?] by each man This was a matter of precaution as some were not able to gauge exactly their capacity for Liquor & as I did not drink I ~~could~~ [-----] was used as a sort of an Alcoholometer & refused to advance money when the limit was reached^l the last occasion that I acted as treasurer was the joining of the outfit by a new man from Illinois— He was told of^c the custom & gave me his money. He became ~~drunk~~ frisky^c with such rapidity that it surprised me & I refused to advance money whereupon I was knocked down & considerably battered before the rest of the party could intervene which they did the ~~mememb~~ member from Illinois was rendered unconcious I gave up this form of amusement thereafter—^f

[192] While at Lvl the 1st time, & working on the press wire the occasion arose to take the Presidents message & at the same time Andrew Johnsons ~~vet~~ long winded veto of the District of Columbia bill— The conjunction of these two long messages was due to the fact that the Presidents message although printed & mailed to the postmasters throughout the country & to be given out on a fixed day, thru some failure of the mail ~~could~~ was not & could not reach Louisville in time for publication so it had to be sent from Cincinnati west—

[193] The manager had arranged with me to come around at 10 oclock in the morning & take the veto message which made about 11 columns of [--]a newspaper before I had finished this it became known that the Presdt Regular Message to Congress must also be received by telegh & I was asked if I thought I could do it I said I thought I could. the last ½ column of the veto was

taken by another Opr & I started on the big message which was filled^c I think two pages of the newspaper. towards the end of the message I introduced a novelty which was greatly appreciated by the newspaper people. This consisted in paragrafing the copy or swriting it in sections so ~~that th~~ called by the printers "takes" These sections made exactly three lines in the^c printed column, and to make ~~the~~ a good appearance there should not be to few or too many words The night editor eowhen the copy was read from the telegh ofs run his shears between these sections & ~~t~~ these were divided up among a dozen printers by this division of labor a column could be set up quickly & releived the Editor from doing it himself— I was 15 hours in the chair on this occasion without a moments intermission for food.

[194] For this I was given a dinner by the newspaper [-]men

[195] I never had ~~much of~~ a high opinion of Andy Johnson after that I believed he talked too much [~~Especially as he had been copying some of his speeches from?~~] no

[196] While at Louisville the 2nd time— I attended an auction one day and bought 20 unbound^c volumes of the North American Review for 2 dollars— these I had bound & delivered to the telegh office.— One morning after ~~the papers had~~ getting through the press I took 10 volumes on my shoulder & started for home It was rather dark & while nearing home which was a room above a saloon I heard a shot & stopped. a policeman run up & grabed me by the throat. fortunately I knew him & He had yelled but I being rather^c deaf did not hear & he brot me to by the shot He supposed I had stolen the books. through all my travels I have preserved those books & have them now in my Library—

[197] While at Lvl I got for the 1st time an insight as to how speeches were reported. The associated press had a short hand man travelling with Presdt Johnson when he made his ecelebrated wswing around the circle in a private train delivering speeches— The man engaged me to write out from his reading the notes. He came in loaded & on the verge of incoherence— we started in. about every 2 minutes I would have to scratch out whole paragraphs & insert the same thing said in another & better way— he would frequently change words, always to the improvement of the speech. I couldnt understand this & when I ~~had~~ we got thru & I had copied about 5 columns I asked him that if he read from notes why these changes "Sonny" said he if these politicians were ~~report~~ had their speeches published as they delivered them a great many short hand men would be out of a job The best short handers are ~~these~~ & the holders of good positions are those who can take a lot of rambling incoherent stuff & make a rattling good speech out of it ~~This man was~~ This man was one of the most unique characters I ever saw

[198] When I left Louisville for the 1st time I with 2 other telegraph operators had saved up money & started to take position in the Brazilian Telegraph as an advertisement had been inserted in some paper stating that operators were wanted. We had timed our departure from Louisville so as to catch a specially chartered steamer which was to leave New Orleans for Brazil on a certain day to convey a large number of Confederates & families who disgusted with the US were going to settle in Brazil— We arrived just at the time of the great riot where several hundred negroes were killed & the city was in the hands of a mob— The Government had seized the steamer we intended to go in for to bring troops from the Yazoo river to New Orleans to stop the rioting— myself & companions visited another shipping office to make inquiries as to the possibility of going to Brazil in other vessels While in this office an extremely old man sat in a chair near the desk of the agent. after making inquiries & finding it impossible to find a vessel, The old man turned to me & asked why I wanted to go to Brazil I told him whereupon he got up from his chair & shaking his bony finger in my face said that he had sailed the sea for 50 years & had been in every port in every country that there was no country like the US that if there was anything in a man the US was the place to bring it out & that any [money?] man that left this country to better his condition was an ignorant damned fool. I had been thinking this way myself for the last few days & the speech of the old man I considered good advice So I told my companions that I was going home. but they were bound to go somewhere & I learned afterwards that both had gone to Vera Cruz & died of yellow fever.

[199] 2nd time in Louisville they had moved into a new office & the discipline was now good. I took the press job, in fact I was a very poor sender, and therefore made the taking of press reports a speciality. The newspaper men allowed me to come over after going to press at 3 am & get all the Exchanges I wanted these I would take home & lay at the foot of the bed. I never slept more than 4 or 5 hours so I would [work?] awake at 9 or 10 & read those papers till dinner time As I thus kept posted & knew from their activity every member of Congress & what committees they were on & all about the topical doings as well as the prices of different breadstuffs in all the primary markets, I was in a much better position than most operators to call on my imagination to supply missing words & sentences which frequent in those days with old rotten wires badly insulated especially on stormy nights— on these nights I had to supply in some cases 1/5 of the whole matter—pure guessing but but I seldom got caught except once There had been some kind of [an-meeting?] a convention in Virginia in which John Minor Botts was the leading figure. there was great excitement about it and there had been

two votes taken on the 2 days of the convention. There was not doubt but the vote the next day would go ~~the same~~ a certain way ~~My~~ A very bad storm came up about 10 o'clock at night I my wire worked very bad. then there was a cessation of all signals then I made out the words Minor Botts The next was a N York item— I filled in a paragraph about the convention & ~~that~~ how^c the vote went as I was sure it would but the next day I learned that instead of there being a vote the convention had adjourned one day^f

[200] ~~while~~ One night I went into the new battery room to get some sulphuric acid for a battery I had made. The carboy slipped & I couldn't lift it back so about 4 gallons of acid started in to leak through to the private office of the manager below. In the morning I was notified to appear before the manager He said that he couldn't afford to keep me any longer & I left for Cincinnati where I for the 2nd time got a job on & in few days was put onⁿ the press wire

[201] 1st job—

[202] After leaving Stratford junction, I got a position as operator on the Lakeshore & Michigan Southern at Adrian Mich [~~working?---~~ ----] in the [---] Division Supts office. as usual I took [---]the night job which most oprs disliked but which I preferred as it gave me more leisure to Experiment. I had obtained from the station agent a small room & had established a little shop of my own. one day the day opr wanted to get off & I was on duty. about 9 o'clock the Supt handed me a dispatch which he said was very important & I must get it off at once the wire at the time was very busy & I asked if I should break in & got orders to do so^o ~~but~~ acting under the orders of the supt I broke in & tried to send the dispatch but the other opr would not permit it & the struggle continued for 10 minutes. I finally got possession of the wire & sent the message in about 20 minutes the Supt of Telegh who then lived in Adrian ~~but~~ & went to his office in Toledo every day happened this day to be in the WU office up town & it was the Supt who I was struggling with. He was livid with rage when he arrived^p & discharged me on the spot. I told him the Genl Supt told me to break in & send the dispatch he then turned to the Supt who had witnessed this burst of anger^o & said Mr H did you tell this young man to break in & send your dispatch he repudiated the whole thing— Their families were socially close & I ~~became a wanderer~~ was sacrificed^r My faith in human nature got [-----] got a slight jar—

[203] I then went to ~~Toledo~~ Toledo & got a job at Ft Wayne Ind on the Pittsburgh Ft Wayne & Chicago RR now leased to the PRR— This was a day job & I did not like it I then got a place in the WU office at Ind W Union office in Indianapolis—work-

ing a way wire [-] but I was very ambitious to be able to take press report. while the position was a day position I ~~was~~ taking no interest in anything except the telegh came around every night & on an adjoining table ~~copied~~ to the regular press opr would copy press until about 1 am & then go home I ~~was~~ but it came faster than I could write it down legibly— at this time I conceived the idea of taking two old Morse Registers which recorded the dots & dashes by indenting a continuous strip of paper the indenting point being worked by a lever & magnet [-]I arranged these 2 instruments so I could receive the regular press signals at ~~high~~ ~~spee~~ their regular rate & record the same on the strip of paper of course I could have read & copied^s the signals from the paper but taking by sound was the ambition of all oprs the old Registers being obsolete. ~~but~~ but I arranged the second register [-]so that the strip passing through it the indentations were made to actuate a delicate double lever causing the ~~air~~ Local circuit of a sounder or receiving instrum to be opened & closed corresponding exactly to the original signals This it did with great perfection When press was coming over the wire the primary register recorded them at the rate of 40 words per minute. The paper strip passing into the 2nd Register repeated these signals audibly on the sounder but at the rate of 25 or 30 words per minute according to the speed of the clockwork, which could be varied at pleasure. [-]by the aid of another day^c opr who was ambitious I got permission from the press man^r to put this in circuit & together we took press for several nights my companion keeping the apparatus in adjustment, & I copying. The reg Press opr would go to the theatre or take a sleep— only finishing the report after 1 am— Soon ~~thone~~ of the newspapers complained of bad copy etc towards the end of the report ie^u from 1 am till 3 & requested that the opr taking the report up to 1 am which was ourselves^v take it all (~~ourselves~~) as the copy was unobjectionable. This led to an investigation by the manager & the scheme was forbidden Of course having more time I could make better copy than the regular opr

[204] This instrument many years afterwards was applied by me to teleghy for transferring messages from one wire to any other wire simultaneously or after any interval of time. It consisted of a disk of paper the indentations being formed in a volute spiral exactly as the disk phonghs of today & it was this instrument which gave me the idea of the phonograph while working on the Telephone—^f

[205] Not liking Indianapolis I obtained a situation in ~~the~~ WU ofs in Cincinnati on a way wayire as a plug opr. Operators were designated 1st class oprs & plug oprs, the latter being inefficient & there was very little association socially between the two classes.

[206] I worked a wire which ran to Portsmouth Ohio. I kept up the practice of coming around nights to copy press & would willingly act as a substitute for any opr who wanted to get off for a few hours. The few hours in most cases meant all night. however I didnt care, requiring little sleep but I was bound to become proficient in the very shortest time. The salary I received was 80 dollars per month. I made some extra by copying plays for the theatre, by using the telegh.

[207] ~~Whil~~ One night I came around and was working a local wire when the little Dutch boy who carried press came up in the office & said Lincoln was shot. Nobody believed him but he stoutly maintained that it was on the bulletin board at the Inquirer office & that there was a big crowd in the street. We found that it was true & that one of the oprs had taken a short special from Washington without sensing it, probably thinking of his girl or something else which is not unusual, some oprs become so expert that they work unconsciously. I knew of an instance where a press opr fell asleep & still continued to write it down correctly, the manifold boy guiding his hand when ~~it~~ his agate stylus^w got over the edge of the [-]sheet & he^c was ~~working~~ writing on the table. This peculiar state of the brain doing intellectual work unconsciously should be investigated.

[208] This same night about 10 oclock we received & sent from Washington & long message which was sent to every mayor in Ohio notifying them of the death of the president.

[209] Sometime after this the oprs at Cleveland started in to form a Union of all the oprs in the US, to be called the Telegraphers Union of the US.

[210] A committee of 3 were to come to Cinninnati to ~~init~~ form & initiate the [-]oprs here. At that time there were 8 oprs working nights. the formation of the Union resulted in a jollification. The imbibing of large quantities of Brewery Serum although most of the men was immune to that anesthetic & only 2 men turned up for work. among the missing was the press opr— When Cleveland called up the different cities & Cinninnati ~~signal~~ ~~came~~ for press* I made up my mind that I would ~~to~~ try my hand at it as some report was better than none at all, and that I couldnt see how I would be discharged for the attempt & to prevent delaying the report by interrupting for repetitions I determined I would get what I could & not interrupt.

[211] An agate stylus was used and 5 copies were taken simultaneously by the use of oiled tissue & black paper. One copy was an office copy to settle disputes.

[212] I stuck to the wire till 3 am—the copy looked fine if viewed as a whole as I could write a perfectly straight line across the wide sheet which was not ruled, and there were no flourishes but the individual words would not bear close inspection. When

I missed a understanding a word there was no time to think what it was so I made ~~the~~ an illegible one to fill in trusting to the printers to sense it I knew they could read anything because Mr Bloss an Editor of the Inquirer made such bad copy that one of his editorials in manuscript was ~~pined~~ pasted up on the notice board in the office with an offer ~~to~~ of 1 dollar to any man who could read twenty consecutive words. nobody ever did it. When I got through [-]I was too nervous to go home so waited the balance of the night for the day manager Mr Stevens to arrive to see what was to be the outcome of this Union formation & my efforts He was an austere man & I was afraid of him—

[213] I read the morning papers which were [-]came out about 4 am & the press report read perfectly which greatly surprised me [---- --- -----] I went to work ~~and th~~ on my regular wire. there was considerable excitement but nothing was said to me neither did Mr Stevens examine the copy on the office hook which I was watching with great interest. However about 3 pm he went up to the hook grabbed the whole, looked at it as a whole without examining it in detail for which I was thankful & jabbed it back on the hook I knew then I was all right. He then walked over to me & said young man I want you to work the Louisville wire nights your salary will be 125. Thus I got from the plug classification to that of a 1st class man.

[214] While working at Stratford Junction Canada, I was told by one of the freight conductors that in the freight depot at Goodrich there was a ~~heap~~ several boxes old broken up battery I went there & found over 80 cells of Groves nitric acid battery one of the electrodes of each cell being made of sheet platinum— The operator there who was also agent when asked if I could have the tin part of these batteries readily gave his permission thinking they were tin I removed them all amounting to several oz— [---] platinum was even in those days very expensive & I only owned 3 strips. &I was overjoyed at this acquisition & these strips & the reworked scrap are used to this day in my laboratory over 40 years

[215] After working at Cincinnati (1st time) for several months a friend of mine at Memphis teleghd me that he could get me a job at Memphis Tenn. as I wanted to see the country I accepted it & went to work nights on the N York side. The telegh was still under Military Control not having been turned over to the original owners the Southern Telegh Co ~~but~~ [----- -- --- -- -] In addition to the regular force there was an extra force of 2 or 3 operators & some stranded ones which was a burden to us as board was high— One of the stranded oprs was a great source of worry to me he would come in at all hours & either throw ink around, or make a lot of noise. one night he built a fire in the grate & started to throw pistol cartridges in these

would explode & I was twice hit by the bullets which left a black & blue mark. another night he came in & got from some part of the building a lot of stationary with Confederate states printed on head He was a fine operator & wrote a beautiful hand. He would take all a sheet write A then Capital A then another sheet with the A made another way, & so on through the alphabet, each time crumpling the paper up in his hand & throwing it on the floor— He would keep this up until the room was filled nearly flush with the tables then he would quit.

[216] Everything at that period was wide open demoralization reigned supreme. there was no head to anything. At night myself & companion would go over to a gorgeously furnished Faro bank & get our midnight lunch. Th[---] Everything was free

[217] there was over twenty keno rooms running one of them that I visited was in a [method?] Baptist Church The man with the revolving wheel being in the pulpit & the gamblers in the pews. I was rather pleased than otherwise when I was discharged for the invention of the repeater

[218] While there the manager was arrested for something I never understood & incarcerated in a military prison about ½ mile from the office. the building was in th in plain site of the office & 4 stories high^r He was strictly incommincado. One day thinking he might be confined in a^r room facing the office I put my arm out of the window & kept signalling dots & datshes by the movement of the arm. I tried this aseveral times for two days finally he noticed it & putting his arm out through the bars of the window^a we established communication he sent several messages to his friends & was afterwards set free

[219] When working in Cincinnati the 2nd time the office had been moved & the discipline was very much better— I was put on press nights which just suited me I rented a room in the top floor of an office building bought a cot & an oil stove bought a foot lathe & some tools & cultivated the acquaintance of Mr Sommers supt of telegh of the Cinnccinnati & Indianapolis RR who gave me permission to take such scrap apparatus as I desired & which was of no use to the Co— Sommers was a very witty man & fond of experimenting himself & we worked on a self adjusting Telegh Relay which would have been very valuable if we could have got it. I soon became the possessor of a second hand Rhumkoff induction Coil which although it would only give a small spark would twist the arms & clinch the hands of a man so he couldnt let go of the electrodes. both Sommers & I were delighted with this apparatus one day we went down to the round house of the RR & got behind connected up the spring^c wash tank in the room with the coil one electrode going to Earth— above this [---]atwash room was [---] a flat roof. we bored a hole through the roof & could see the men as they came in— the 1st man that came in dipped in the water the floor

being wet formed a circuit & up went his hands he tried it the second time with the same result. he then stood against the wall & had a puzzled Expression. we surmised that he was waiting for somebody else to come in which was shortly after, with the same result. they then went out & soon the place was crowded & there was considerable excitement various theories were broached to explain this curious phenomenon We enjoyed the sport immensely

[220] Not long after this he came to work at Cincinnati office a man by the name of Geo R Ellsworth. This man was the telegraph operator of Morgan the Confederate Guerilla General who gave so much trouble to the Union by raiding & capturing or destroying stores. Ellsworth tapped wires, read messages & sent false ones, and did an immense amount of mischief generally by his superior ability as an Operator. [-]It is well known that one operator can recognize another by the way he makes his signals & [-]Ellsworth possessed the art of imitating these peculiarities & therefore he easily deceived the Union Operators. We soon became acquainted & he wanted to invent a secret method of sending dispatches so an intermediate operator could not tap the wire & understand it. He said that if it could be accomplished he could sell it to the government & get a large amount of money. this suited me & I started in & succeeded in making such an instrument which had the germ of the Quadruplex in it. Afterwards invented by myself & now generally used throughout the world. This apparatus Quadruplex permitted the sending of 4 messages over one wire simultaneously. By the time I had succeeded in getting the apparatus to work Ellsworth suddenly disappeared & it was only years afterwards that I heard that the Tameness of a telegraph office was obnoxious (& perhaps other reasons) & that he had become a gun man in the panhandle of Texas & had been killed. from his appearance I never would have thought such a thing possible. Many years afterwards I used this little device again for the same purposes. At Menlo Park NJ I had my Laboratory. there were several WU wires cut into the office [---] Lab which was used by me in experimenting with nights. one day I sat near an instrument which I had left connected during the night. The wire I soon found was a private wire between NY or Phila & I heard among a lot of stuff a message which surprised me. a week after that I had occasion to go to NYork & visited the NY office of the lessee. I told him I asked him if he hadnt sent such a message. the expression that came over his face was a sight. he asked me how I knew of any message. I then told him the circumstances & suggested that he better cipher such communications or put on a secret sender. the finality of the interview was that I installed my old Cincinnati apparatus & which was used thereafter for many years—

[221] Martins Questions

[222] While working in NY for WU you are said to have stayed & slept in its shop or laboraty all times. have u any recolctn—^f

[223] Its said you started Lab of ur own on getting Laws position— where was it was it not fm tr u moved to Newark shop—^f

[226] Do u recal exact condition when u helped out the Laws gold system & got berth for so doing R W Pope gives brief interesting account of it

[227] Date of that occurance seems to been Black Friday Sept 4 1869— Had u bn long in NY before that day & how did you happen to be in Laws headqtrs

[228] Do u recall anything abt ur 1st residence or workshop in NY

[229] Mention is made of a trip to Rochester NY in 1869 to try your duplex on Lines of Pacific & Atlantic see Dicksons book p 56-7) This seems all wrong F L Pope is named as assisting—^f

[233] Any recollections of John Kruezi The family appears to have been few if any records of his. He wasnt kind of man to keep diary but always ready to talk about those early days—

[236] Are any details u recollect abt Murray. he seems to have been a good associate & stand by^f

[237] Did WU put up money at this time or did u have outside customers—^f

[239] The period 1871-7 began ur active tkg out patents abt a fortnight ever since Wld like remarks on patent & patent system its utility or futility—could we get along without it How could it be improved Has it not been of some real benefit to you If you could collect all the royalties justly due what would it amount to & how much have you actually got

[244] In early days of telegh didnt lots opr knock around country as you did it seems to have been one of the habits had it anything to do with the war Did the Civil war impress you much.

[245] Geo L Anders in Wms shop

[246] Adams says— going along sts Boston I wld say Milt do you see anything I cld apply elec to^f

[247] Liar—^f

[250] Is it true you worked upon the typewriter at any early stage of its development—^f

[252] Who was Geo Harrington fr are there any details or anecdotas abt him Delany comes later What about him— What was his actual share of the work were they forerunners of Batchelor—

[266] Geo Little got people into auto & failed— I brot in to save the day. Expmts. E H J. Delany Charleston— pie— typewriter Craig asscd press—

- [269] Dean at Newark & at Goerck—
 [272] Carrol D Wright took out 1st pat—
 [280] Black friday Wm Belden— opr back end 60 Bdway
 [317] 1873 visit English PO Test. Telgh st. Think I have
 this—
 [379] Supplied funds to Thau & Herman took no paper
 He repudiated whole thing

AD (photographic transcript), NjWoe, Archives Office; "mme", possibly in another hand, written in bottom margin of several pages. ^a"at . . . died" interlined above. ^bThis and paragraphs through number 102 (except 22, 25, 33, 35, 39, 49, and 55) overwritten with large "X"; paragraphs 269, 280, and 317 also thus overwritten. ^cInterlined above. ^d"to . . . Brazil—" interlined above. ^e"Geo R Ellsworth—" interlined above. ^fFollowed by horizontal line. ^g"viscous ink" interlined above. ^h"BC OK why not JC" interlined above. ⁱ"& poet" interlined above. ^j"was a large man" interlined below. ^k"would . . . sleep—" written over centered horizontal lines. ^l"& . . . reached" interlined above. ^m"was told" interlined above. ⁿ"in few days was put on" interlined above. ^o"& . . . so" interlined above. ^p"when he arrived" interlined above. ^q"who . . . anger" interlined above. ^r"was sacrificed" interlined above. ^s"& copied" interlined above. ^t"from . . . man" interlined above. ^uCircled. ^v"which was ourselves" interlined above. ^w"his agate stylus" interlined above. ^x"for press" interlined above. ^y"for . . . thankful" interlined above. ^z"& . . . high" interlined above. ^{aa}"through . . . window" interlined above. ^{bb}"or destroying" interlined above. ^{cc}"(& . . . reasons" interlined above.

E. NOTES

Taken from a notebook that has five pages in Edison's hand, these "Notes" are numbered consecutively from 1 to 33.

[13] 13 Geo Little, got Geo H ex asst Tresr US & others Genl Palmer & others by Lab expts which were failures when teried on actual lines— I was called in— pie. Typewriter. DH Craig Assd Press

[19] 19 = Carrol D Wright, took out 1st pat Vote Recorder #

AD, NjWoe, Lab., N-09-06-27. All notes except those numbered 26 and 27 overwritten with a check mark.

F. NOTES

This notebook includes sixteen pages in an unlabeled section in Edison's hand relating to the Dyer and Martin biography. They are preceded by a memo to Edison from William Meadowcroft dated "June 28/09" stating that the notes on the following page