

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 high² He was strictly incommunicado. One day thinking he might be confined in a room facing the office I put my arm out of the window & kept signalling dots & dashes by the movement of the arm. I tried this several times for two days finally he noticed it & putting his arm out through the bars of the window^{2a} 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 telegraph of the Cincinnati & 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 Telegraph 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 couldn't 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^{bb} stores El 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^c 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 ~~aff~~ Thafterwards invented by myself & now generally used throughout the world This apparatus Quadruplex^c 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^{cc} & 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~~ 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^c years—

[221] Martins Questions