My Dear Charles,   
  
I have decyphered the first section of my Uncle’s will and I am deeply saddened and perplexed by it. I had hoped that it would explain the sad circumstances of his death and allow me to remember him with the affection I recall from my childhood. Of course I knew that Tiberius had been engaged in secret government work prior to the War, but I had refused to believe that he could have had anything to do with those foul new weapons that so scarred my generation. I am not sure that I want to read the rest of his letter to me. Before I read it I could not have accepted that he had collaborated with the enemy, but I had not realized that he was acquainted with Hahn, a fact I read with distaste, and his claim to have maintained that relationship at the request of the government is the worst sort of self-justification.   
  
I am puzzled by Tiberius’s strange instruction that I should decypher the document. It seems a trivializing, if not to say frivolous, request. It is hard to square this with the suicide note of a traitor, but perhaps I have been here on Malta for too long. It is many years since I spent time in the company of friends or relatives and, though I find the solitude consoling, it makes me a poor judge of character.   
  
I am sorry to say that I am ashamed of my Uncle and I have decided not to continue with this unpleasant game. I will have nothing more to do with him, but I see no need to add to the embarrassment of his friends and family and I would ask you to maintain the greatest discretion in your communications concerning this disappointing document, as I have done in encrypting this letter.   
  
Yours sincerely,   
  
Nicholas

I, Tiberius Hawksmoor, being of sound mind, hereby revoke all other wills and codicils I may previously have executed. This document is my final declaration of intent for the disposal of any assets that remain under my ownership and control, and is my final opportunity to set the record straight concerning the awful events of the last fifteen years. It is also my final letter to you, dear Nicholas.   
I could begin in any number of ways, but perhaps I should start back in Nineteen Thirteen, when I received an invitation from Prof. Otto Hahn to attend a meeting of the Deutschen chemischen Gesellschaft zu Berlin. The society was to be addressed by Prof. Emile Fischer on his work concerning corrosive gases and their effects on the human body. This was a subject that I found personally distasteful but professionally of profound importance, since I owned and operated a number of factories manufacturing chemical products, and I took the safety of those plants and my employees very seriously. The visit was productive and I learned a lot, perhaps more than was good for me.   
On my return I was met from the boat in Southampton by two gentlemen from an organization they called VERONA - Volunteer Enterprises, Royal OrdNance Association. This top-secret government agency was responsible for recruiting leaders of the manufacturing industries to support the diplomatic and military efforts of the Foreign Office, and they asked me to provide them with a report on Fischer’s work. I had deep reservations, but I recognised the growing threat of war and I was increasingly afraid that chemical weapons might be used. In any case the two gentlemen, who, for obvious reasons, I nicknamed Valentine and Proteus, were very persuasive. I learned later that they belonged to a group within VERONA known as the Fabulists, dedicated to what we would now call information warfare. They were skilled proponents of propaganda and misinformation, and masters of a whole panoply of methods of persuasion.   
Knowing of your own dreadful experiences I am ashamed to admit that I found myself attracted by the new challenges of work with the agency. At that stage I was almost entirely concerned with investigating methods of protection against the ravages of Chlorine and Mustard Gas attacks and I was convinced that my work could save lives. I rediscovered a love for the daily rituals of the laboratory and enjoyed the close collegial atmosphere in the secret world of VERONA. At their request I maintained my contacts with the German scientists, convinced that dialog might prevent the full horrors of the coming war, but in June Nineteen Fourteen a conversation with V and P led to me to realise that, by providing our army with protection from the effects of these terrible weapons, my research could precipitate their use by our own side.   
Frightened by this and by the growing political instability in Europe I resigned immediately from the agency and returned to the laboratories of the company I had founded. The two gentleman of VERONA were, to say the least, unhappy, but I convinced them that my factories were still vital to British economic interests and for a while they left me alone. This story might have ended there if I had not received the telegram from your mother on January Fifth, Nineteen Fifteen.

My dear Nicholas   
  
I know how shocking these revelations must have been for you, and given your past experiences no one could blame you for the decision you have made to turn your back on your uncle’s strange request. Nonetheless, while we are still unsure of the purpose of the document I think it would be a mistake to relinquish the task he has set you.   
  
I must admit that I find it almost impossible to reconcile your current view of Tiberius with the man we both knew, and so I have taken the liberty of deciphering the next chapter of his will myself, in the hope of revealing more information that might help us to understand him better. I know that its contents will not entirely reassure you, but I think you owe it to yourself, if not to Tiberius, to read on.   
  
In the meantime allow me to share some remarks concerning the will. Throughout my professional life, I have had the misfortune to read a number of final letters written by men driven to self destruction and I must tell you that this has an entirely different feel to it. There is a frankness which suggests that Tiberius is more concerned for the truth to be known than he is to protect his reputation. I have a feeling that Tiberius understood that this would be hard for you, but whether you like it or not I am certain that you will learn the truth if you complete the challenge he has left you.   
  
You said that we should maintain the greatest discretion, but I am sure Tiberius would remind you that a Caesar shift cypher could not possibly provide you with the degree of security you require. I suggest that you might follow Tiberius’s lead and use something more secure like an affine shift cypher for your reply.   
  
Yours,   
  
  
Charles

The news that you had been picked up by Military Police trying to volunteer for your local regiment filled me with dread. You were not alone, I later met many underage boys who had deceived the recruiting sergeants and made their way to the battlefields of France and Belgium, but your courage shamed me into joining the fight myself.   
  
At that time I had only just begun to hear stories of the misery of trench warfare but it was clear to many of us that this was a new kind of war, one in which technology would play a central role. This fact was not lost on my erstwhile employers who were quick to learn that I had joined up and to my surprise the two gentlemen from VERONA met me as I disembarked on the continent with a thousand other new recruits. I was taken to a chateau for briefing on the German development of gas weapons, and on the twenty first of April nineteen fifteen I was sent by train to join the Second Army sector in the Ypres Salient at St Julien.   
  
The following day I was introduced to the full horror of modern warfare. At five o’clock the lead pipes laid over the edge of the German trenches hissed and a mist rolled towards us across the open land. It was yellowish-green, a hellish, sulphurous haze, and the effects were almost instantaneous. VERONA had anticipated the attack and my orders were to record my observations on the deployment of the weapon. I learned later that the valves were open for just five minutes before the gas cylinders were empty and the gas was blown by a gentle northern breeze at about five miles an hour. But the effects were felt for hours afterwards, and the leisurely pace of the billowing cloud belied its destructive power as it drifted along a section of the trenches at least a half mile in length.   
  
The gas left many survivors unable to speak, and this increased the panic, especially among the younger troops. Those who were not overwhelmed by the choking chlorine withdrew to Boesinghe, but fear of the terrifying new weapon seeped through the lines and that position too was soon lost.   
  
While other VERONA agents continued to take observations across the battlefield I was sent to the rear to examine the survivors, and to record the efforts of the medics to alleviate the soldiers’ suffering.

My dear Charles,   
  
At your urging I am continuing to decypher my Uncle’s will. His statement that “the danger did not end with the war” is somewhat alarming. Was it his intention to suggest that I am at some risk? Could his actions during the war really be posing a danger to me after all this time? It is clear that we will have to complete the decryption if we are to understand.   
  
I did not encounter VERONA during the war, and have heard nothing about it during my exile here on Malta, but I think it might be time to make discrete enquiries about it in London. Would you oblige me in this?   
  
One other thing. Almost certainly I am jumping at shadows, but my landlady remarked that over the last week or so she has noticed two men loitering in the neighbourhood of my apartment. I cannot believe that this is connected with my Uncle’s will, but his warning has alarmed me and I have engaged the assistance of a local detective to keep watch.   
  
I take your point about securing our communications. Tiberius is clearly more concerned to secure these later sections of the document as well, and I had to work hard to break the keyword cypher he used here. Returning to the wartime convention of five letter blocks really does add to the security of the text, and I had to carry out frequency analysis on this section of the will. I suggest that in the future we too use the wartime convention. I think that with this precaution the affine shift cypher should afford us sufficient security in our letters to one another.   
  
Yours,   
  
Nicholas

The effect of the gas attack on morale was catastrophic and the generals over-reacted. Terrified that the front line positions would break up they sent young officers to hold the line and prosecuted deserters with ferocity. I thought I had seen the worst that war could offer in the hospitals treating the terrified victims of the gas, but the firing squads were worse, and I was sent by VERONA to witness one. I realize now that their intention was to frighten me. My reports on the first gas attack made clear my loathing for this new type of warfare and they needed to find ways to pressure me to work on the development of our own weapon.   
  
The young subaltern had fled the trenches as the gas rolled along them. He had urged the others to run too, and that added to his guilt in the eyes of the court martial. He was sent to the firing squad and VERONA chose to use his death as a warning to me. Their plan might have backfired if I had chosen to blame our generals for this savage treatment of young and frightened men, but instead, in my anger following the attack at Ypres, I chose to blame the enemy for this death too and finally agreed to lead a team working on gas weapons.   
  
I can’t forgive myself for what happened later, and it is clear that, standing by the firing squad in the cold dawn, I made the worst decision of my life. The young man stood alone and brave and he reminded me of you. We had stopped you from joining the army once, but soon you would be sixteen and we would not be able to prevent you joining the regiment then. I convinced myself that by hastening the end to the war I would save many lives, and I might save you.   
  
All sides in that terrible conflict were engaged in a desperate search for a new weapon to break the deadly stalemate of trench warfare but even if things had turned out differently it would be still hard to say that I made the right decision that morning. I will understand if you can’t forgive me, but as you will later see things were to become far more complicated and dangerous for us both and I am sorry to say that the danger did not end with the war.   
My dear Nicholas,   
  
Your Uncle’s revelation concerning his work on meteorology begins to explain his move into mathematics following the War. I always wondered why he had left the laboratories and factories, but his experience of industry must have soured as he saw the suffering that new inventions were causing on the battlefields. I have no knowledge of the work he subsequently did, and the few people I have asked have been strangely unable, or perhaps reluctant, to tell me anything of value.   
  
The detective you hired to look into the mysterious figures on the island has contacted me with a report on his investigations. He was able to trace two men who had been making enquiries about your circumstances, but unfortunately they seem to have been alerted to his investigations and left Malta two weeks ago. He has a contact in the shipping company who was able to track their movements via the wireless telegraph, and they disembarked from a commercial ship in Tilbury. At his urging a clerk was assigned to follow them and they were last seen entering a building in Whitehall. I fear that you may be of interest to the government, but I am at a loss to know why. Even having deciphered the fourth section of the will, which again was encrypted using a keyword cipher, it is still not clear how the events of so long ago could pose a risk to you now. On the other hand it is clear that Tiberius did not entirely trust the VERONA agents. I hope that the fifth chapter, which I will leave to you, will begin to explain why.   
  
  
Kind regards,   
  
Charles

I have only a hazy recollection of the events of the next few months. The rain fell incessantly and the trenches, and our boots, filled with water. I spent many hours with fingers frozen as I took readings of wind direction and force, and experimented with nozzle designs for our gas weapon. I was haunted by the memory of the dawn firing squad and by the suffering of our troops following the German attack and I was seized by an urgency that blocked all feeling of common humanity with the enemy. The Fabulists had done their job well.   
It quickly became apparent to me that forecasting atmospheric conditions would be of crucial importance in determining how and when to use the weapon without unduly jeopardizing our own troops. After several months in the trenches taking measurements I returned to VERONA HQ and began work on a new statistical model of wind movements based on the work of Bayes. You had joined up and been sent to the front by this time, and as I laboured I began to hear tales of your heroism in battle. I was ashamed to be enjoying the comforts of the Chateau, but by then I was obsessed with the belief that my work could end the war quickly and that I might save you and hundreds of thousands of young men like you.   
Finally beginning to make progress on the difficult task of analyzing wind patterns I showed my work to Valentine and Proteus and to my surprise they immediately reassigned me to another division.   
I can see now that the safe deployment of the weapon was a secondary concern for them and they were preoccupied with the lethal power it would convey. I think they were disappointed that I had failed to engage in the design of new poisons, but I could never do that. I still recalled my horror as I listened to Hahn in Berlin describing the effects of mustard gas. There was something chilling in the contrast between the cold dispassion of a scientific lecture and the vileness of the results he reported, and I could not bring myself to work in the laboratories.   
Looking back I can see that the Fabulists needed me out of the way in order to carry out the next step of their plan, however, in reassigning me, the two gentlemen from VERONA had made a very bad mistake.

Dear Nicholas, things are much clearer now, and I realize the danger you are in. I was visited today by two gentlemen matching the description of Valentine and Proteus. They claimed to be acting for the government and were asking if I knew where to find you. They clearly were aware that you had left Malta, but fortunately had not, as far as I can tell, traced you here.   
They were most insistent that they needed to talk with you, saying that the government was owed a substantial sum from the estate of your Uncle and that they wished to discuss terms for repayment. I have to say that I was impressed by their ingenuity. They might equally have claimed to be offering you a sum owed to Tiberius, but the tale they spun carried just the right level of threat to be (almost) convincing.   
I deciphered the latest chapter of your Uncle’s will with little more difficulty than I had encountered with the previous section. It was very similar in spirit, and indeed used the same tabula recta, though the encryption algorithm was slightly different. I believe it is known as the Beaufort cipher.   
I recommend that you stay away from London for a little while, until we have considered what we must do to protect you. I have contacts who may be able to help.   
  
Very best wishes,   
  
Charles   
The machinations of the Fabulists had been exposed to me in the intercept I decrypted for Room Forty. They were intent on developing cruel weapons capable of demoralizing and injuring large numbers of enemy soldiers in defiance of all natural laws of warfare.   
  
I had already been exposed to the horror of modern conflict and their plans filled me with revulsion, but I could not have guessed at the full depth of their depravity until I had read the full text of their message, which was an invitation to a demonstration of the weapon. They proposed to test it on Prisoners of War held at a camp near the French border which at that stage was under VERONA guard, and I imagined, since it was difficult to believe that all of VERONA were privy to the Fabulists’ foul plot, that it was under the direct control of Proteus and Valentine.   
  
In my horror I resolved to travel there at full speed determined to confront them and to expose their vile plan. The majority of soldiers, both commissioned officers and enlisted men, are decent honourable men who would be horrified by what I had uncovered. Unfortunately the one man I chose to entrust with the knowledge I had gained, a young lieutenant colonel, was a partner in the crimes of the Fabulists. He had proven his valour at the Front, and like me he had been revolted by what he had seen. I was sure he would share my revulsion, but his hatred of the enemy was too strong and he was excited by what I told him, sure that the new weapon would end the war. He saw victory where I saw a crime.

Dear Charles,   
  
The story of my injury at last makes sense and I am ready to forgive Tiberius. I knew that I had been unconscious for some time after the gas attack, but I had always assumed that I had spent that time in the Field Hospital, remembering nothing after leaving Miss Brittain.   
  
My own enquiries here in London have established that Valentine and Proteus are high-ranking officials in Whitehall with deep connections across the Foreign Office. Moreover it is clear that they are aware of my return to England and I suspect that I am being followed and that my letters are being read. I am increasingly sure that the only reason I am still alive is that they are not certain who else might know Tiberius’s story. It is critical that they do not discover the details and I am sure that this is why Tiberius encrypted the last sections of his will with such care. He must have learned about Hill’s new cypher when he visited Yale three years ago. I am not at all sure I would have been able to decypher this part of the will if he had used a matrix bigger then two by two!   
  
I have to say that the most alarming revelation here is Tiberius’ statement that he was “not yet aware of the full depth of their treachery”. Given the horror of what they did to me and to my men, I find it hard to imagine much worse.   
  
I fear that my life will never be the same again.   
  
Sincerely yours,   
  
Nicholas

Hill Cipher (2x2, keyword HILL (left to right then underneath

Of course the Fabulists were lucky that I had chosen the wrong confidante and, sensing the danger they were in, Valentine and Proteus knew immediately how to diffuse it. They arranged for you to be kidnapped from the trenches and smuggled back to the border under cover of a gas attack. I have never been able to forgive myself for the fact that my enemies chose to attack me by attacking you. Nor can I stop thinking about all those other young men in your regiment wounded or killed by their own side in order to stop me.   
  
I received an official telegram telling me that your corps had been attacked at dawn and that you were missing and presumed dead. It was accompanied by a separate message from Valentine and Proteus telling me that you were alive, but my joy was short lived as I read on: they had arranged matters so that you could easily be found and they planned to brand you as a deserter. I was already convinced of their skills in deception and persuasion, and this threat filled me again with fear for you. The memory of the execution I had witnessed was still fresh in my mind and I could not bear the thought that you might suffer the same fate.   
  
My only hope was to find you before they could fulfill their threat and I travelled that night to the Front in the hope of finding a clue to your location. Arriving at the Field Hospital I interrogated every conscious man I could find, but it was one of the nurses, almost too tired to speak, who set me on the path to finding you. She recalled you crashing into the tent carrying a mortally wounded companion and had treated you for shock and burns. You ignored her pleas to stay insisting that there were others who needed your help, and staggered off into the fog risking everything to save your men.   
  
Even in that chaos the military police kept a close eye on troop movements and when I showed them my VERONA credentials they told me that men matching the description of Valentine and Proteus had been in the neighbourhood. Still unsure who to trust I searched for you alone in every abandoned building I could find, and three days later I found you, bandaged and unconscious, in a farmhouse in the woods to the south of the line. You had been badly burned by the gas, and I think you had been drugged by my tormenters. Perhaps they were showing a glimmer of empathy for your suffering, but it was more likely to have been a method to prevent your escape.   
  
I hoisted you onto my shoulders and walked fifteen miles back to the Field Hospital, where I left you in the care of the Nurse, Miss Brittain, and left to confront the conspirators, not yet aware of the full depth of their treachery.

DEAR CHARLES THIS FINAL CYPHER FROM TIBERIUS WAS A DEVIL IT IS SOMEWHAT RELATED TO THE ADFGVX CYPHER AND I WILL SEND YOU MORE INFORMATION ABOUT IT SHORTLY IN THE MEANTIME ALLOW ME TO SUMMARISE ITS CONTENTS THE FABULISTS HAVE GROWN TOO POWERFUL AND BOTH HE AND I ARE AT MORTAL RISK AND MUST DISAPPEAR YOU CAN SEE IMMEDIATELY THAT HIS LAST MESSAGE CONTAINED ONE SHOCKING REVELATION AT LEAST AND ONCE YOU HAVE READ THE WHOLE OF THE DOCUMENT YOU WILL UNDERSTAND I SHALL BE LEAVING BEFORE FIRST LIGHT TO TAKE UP A NEW LIFE AS A NEW MAN WITH A NEW PURPOSE TO DESTROY VALENTINE AND PROTEUS AND ALL THAT THEY STAND FOR I DO NOT FEEL READY FOR THIS CHALLENGE BUT THEN I NEVER FELT READY WAITING FOR THE COMMAND TO LEAVE THE TRENCHES EITHER WHEN THE WHISTLEBLOWS THERE IS NOTHING LEFT BUT TO CHARGE AND PRAY AND THAT IS WHAT I WILL DO NOW PLEASE DON’T WORRY AND PLEASE DON’T TRY TO FIND ME I WILL CONTACT YOU SOON AFTER THE NEW YEAR IT REMAINS FOR ME TO THANK YOU FOR ALL YOUR SUPPORT OVER THESE LAST MONTHS AND YEARS AS NICHOLAS I HAVE FOUND YOUR SUPPORT AND ENCOURAGEMENT INVALUABLE IN MY NEW IDENTITY I HAVE A FEELING THAT IT WILL BE ESSENTIAL SINCERELY YOURS HARRY

No duplicate letter keywords:

COLABRTED

ACQUINTED

DISCRETON

COMUNIATS

DISAPONTG

ENCRYPTIG

OWNERSHIP

GESLCHAFT

PERSONALY

DISTAEFUL

FACTORIES

SOUTHAMPN

RESPONIBL

DIPLOMATC

RECOGNISD

ATMOSPHER

FRIGHTEND

LABORTIES

FACTORIES

RELINQUSH

DECIPHRNG

SOMETHING

BATLEFIDS

TECHNOLGY

DISEMBARK

DEVLOPMNT

INTRODUCE

DEPLOYMNT

CYLINDERS

DESTRUCIV

OVERWHLMD

CERTAINLY

CATSROPHI

PROSECUTD

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SUBALTERN

BACKFIRED

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COMUNIATS

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INVESTGAO

CONSPIRAY

ENCRYPTIO

ALGORITHM

MACHINTOS

DEVLOPING

DEPRAVITY

HONURABLE

ESTABLIHD

REVLATION

CONFIDATE

ACOMPNIED

INTEROGAD

EVRYTHING

FARMHOUSE

REVLATION

WHISTLEBO

Duplicate letter keywords

PERPLEXED

AFFECTION

RELATIVES

OWNERSHIP

DEUTSCHEN

ADDRESSED

CORROSIVE

FACTORIES

EMPLOYEES

GENTLEMEN

VOLUNTEER

NICKNAMED

VALENTINE

DEDICATED

ATTRACTED

CONCERNED

CONVINCED

COLLEGIAL

CONVINCED

PROVIDING

POLITICAL

GENTLEMAN

CONVINCED

FACTORIES

INTERESTS

RECONCILE

REVEALING

DIFFERENT

FRANKNESS

CONCERNED

CHALLENGE

SOMETHING

VOLUNTEER

SERGEANTS

ERSTWHILE

EMPLOYERS

GENTLEMEN

CONTINENT

FOLLOWING

CYLINDERS

LEISURELY

BILLOWING

SURVIVORS

INCREASED

CONTINUED

ALLEVIATE

STATEMENT

INTENTION

ENCOUNTER

ENQUIRIES

CERTAINLY

LOITERING

CONNECTED

DETECTIVE

CONCERNED

RETURNING

FREQUENCY

TERRIFIED

POSITIONS

DESERTERS

HOSPITALS

TERRIFIED

INTENTION

SUBALTERN

BACKFIRED

TREATMENT

FOLLOWING

CONVINCED

HASTENING

DESPERATE

STALEMATE

DANGEROUS

FOLLOWING

SUFFERING

KNOWLEDGE

STRANGELY

DETECTIVE

CONTACTED

ENQUIRIES

MOVEMENTS

ENCRYPTED

DIRECTION

SUFFERING

FOLLOWING

FABULISTS

MOVEMENTS

THOUSANDS

BEGINNING

DIFFICULT

ANALYZING

VALENTINE

SECONDARY

SOMETHING

FABULISTS

GENTLEMEN

FIVEBLOCK

ENCRYPTED

SOMETHING

CONFLICTS

PROFESSOR

SOMETHING

CONNECTED

MOVEMENTS

UNCOVERED

FOLLOWING

ATTEMPTED

SIMILARLY

ADVANTAGE

DEVELOPED

EXPLOITED

TELEGRAPH

CUNNINGLY

ENCRYPTED

CONFIDENT

TRIGGERED

FERDINAND

TRIGGERED

INFLATION

EXHAUSTED

ATTENTION

GENTLEMEN

VALENTINE

INSISTENT

IMPRESSED

ALGORITHM

RECOMMEND

FABULISTS

INTERCEPT

DECRYPTED

DEPRAVITY

PRISONERS

DIFFICULT

HORRIFIED

KNOWLEDGE

ENQUIRIES

VALENTINE

OFFICIALS

WHITEHALL

ENCRYPTED

STATEMENT

SINCERELY

FABULISTS

VALENTINE

KIDNAPPED

ATTACKING

VALENTINE

CONVINCED

DECEPTION

EXECUTION

WITNESSED

TRAVELLED

CONSCIOUS

COMPANION

INSISTING

STAGGERED

MOVEMENTS

VALENTINE

ABANDONED

FARMHOUSE

SHOULDERS

SUMMARISE

FABULISTS

DISAPPEAR

CONTAINED

VALENTINE

CHALLENGE

ESSENTIAL

SINCERELY