TRAINOR MURDER CASE AS OUTLINED IN CHARGE OF MR JUSTICE SAUNDERS

A very lengthly review of the evidence in the case of The King vs Frederick Phillips and Earl Lund, charged with and subsequently convicted of the murder of Peter J. Trainor, was given by the trial Judge, Mr. Justice A. C. Saunders, in his address to the jury in the Supreme Court on June 28 last. A summary of the address was published at the time. In view however of the importance of the case, and of requests for a more detailed report, The Guardian herewith publishes the official verbatim transcription of Judge Saunders' charge on that occasion:

Mr. Foreman and Gentlemen of the Jury:

We have now reached the last stage of this important and anxious trial in that it now becomes my duty to address you. Perhaps I am justified in saying it is a case of circumstantial evidence. There is no positive, definite or direct evidence that the prisoners committed the crime of which they are charged. The case so far as the Crown is concerned depends entirely upon inferences to be drawn from the evidence submitted. The prisoners" defence is that of an alibi. That they were elsewhere when the crime was committed.

In a case where the evidence is purely circumstantial, if every link in the chain of cricumstances is a sound link, and is well welded into the next there cannot be a stronger case than that; on the other hand it is a kind of evidence which requires of a jury that they shall examine it with the utmost care in order to make sure in passing along the chain of links which make up that which has told against the prisoners, they do not pass by any flaw or break.

Circumstantial evidence does not mean a lot of suspicious cricumstances. That is not it at all. You must have each circumstance which is founded upon, those which are to be pieced together into one whole, and from which the conclusion is to be derived, clearly demonstrated by evidence. It has been said times without number a chain is no stronger than its weakest link; so no circumstantial evidence is worth synthing if any essential circumstance is not established.

Having said all this in regard to circumstantial evidence, let me make this clear to you, that very, very often in criminal cases we can never get better than circumstantial evidence, and very often too it is just as reliable and just as dependable as direct evidence, because facts do not lie as human beings sometimes do. You may and in all probability will regard the facts and circumstances contained in the evidence submitted by the Crown as much more reliable and dependable than the direct evidence of the men charged with having imbrued their hands in the blood of the inoffensive old man Peter J. Trainor.

Gentlemen, you and I have the satisfaction of knowing from what we have observed during the trial that there has been no failure on the part of those entrusted with the duty of watching over the interests of the country's justice; or of those who have been employed in defending the interests of the prisoners.

In the many cases I have from time to time seen in Court I have never seen one in which one could feel more clearly that full justice has been done to their work, both by the Attorney General and his Counsel and Counsel for the prisoners. That to a very great extent lightens my task and makes it that much easier for me.

We might expect all we have heard and seen of the Attorney General as his experience and ability has been recognized for some time past, I feel I would be derelict in my duty if I failed to compliment the less experienced, but none the less worthy counsel for the prisoners on the very creditable discharge of his onerous duties.

Judge's Province

The province of a judge in a criminal case such as this, when he hears some evidence which he regards as untruthful makes it difficult for him to analyze the evidence in detail without exhibiting the appearance of bias. Bnt let me assure you my greatest endeavour will be to bring out the many features of this important case in a most unbiassed manner so that full justice may be done. The Attorney General too should not unduly press any matter. I think in this regard he has been eminently fair. Counsel for the prisoners is expected to defend his clients to the utmost of his ability. This I know he has done.

At the conclusion of the summation of the evidence by Counsel I think it is a wise and reasonable thing that some words should be addressed to the jury from a more judicial and impartial point of view. Very often it is the practice of a judge to let counsel deal at length with the evidence submitted in the case, and for the judge to deal simply with the essential features. It really is the job of counsel to analyze the evidence from every angle, i. e., their respective points of view. It is my practice in every single case which comes before me to deal with every feature and every phase of the evidence as fully and completely as possible In this the most important case that has appeared on the docket in many years, I intend to go into every detail of the evidence as exhaustively as lies within my power and ability.

I may tell you further that it is the practice of a judge to suggest to the jury things which occur to his own mind upon the evidence. I shall give you the benefit of my ideas as to how this crime was committed from the evidence submitted in the case. But I will do so with this caution, namely to remember they are only my ideas which may or may not be correct.

What I will say to you in that connection will be simply my views and observations on the evidence—not that you should accept what I say, but solely for your personal consideration. You may be inclined to give some weight to what I may say, coming from a person the business of whose life it has been to study such cases, to see how they ought to be treated, and to notice the points of them and to see what points tell for or against the prisoners. You doubtless will be inclined to do that, but do it always with this impression upon your minds, that what is addressed to you by way of observation upon the evidence is addressed to you for your consideration, and that it is quite open to you to accept what I say, or accept it in a modified form, or to reject it according to your deliberative judgment. One thing the judge has to do is to guide you in the matters of law. The law you must accept from me, but fortunately in this case very little law is involved. Perhaps I better say this: that there has been some suggestion that you might bring in a verdict of manslaughter. This is not your duty in this case. It is you duty to find the prisoners either guilty or not guilty of the charge in the indictment. It is not necessary for me to repeat what the Attorney General for the Crown told you He informed you what "murder" is. That is all the law that is necessary in this case.

Nature of Crime

The prisoners are charged with having murdered a highly respectable and an exceedingly fine, inoffensive, industrious old man It would be difficult to exaggerate the gravity, even the atrocity, of this horrible crime in such a fine quiet law-abiding city as Charlottetown. It would almost appear after listening to the details of the crime that there is no limit to the depths of human depravity. It is true, gentlemen, that the prisoners are entitled to say that they have no duty in the matter whatever That the burden of proving the charge made against them rests on the Crown and that unless the Crown proves the charges they are entitled to be acquitted

Under our jurisprudence every man is presumed to be innocent until he is found guilty.

Considering the number of witnesses examined, the importance of the case. It will be my effort not to which are involved in it, it becomes all the more necessary that I should give you a clear, concise account of the various stages and aspects of the case It will be my effort not to press one fact too far, but to act as fairly as I possibly can.

The offence for which the prisoners stand charged is the most serious in the calendar of crime. It is the taking of a human life. The life of a remarkably fine old respectable citizen. I need hardly remind you that prisoners so situated when guilty will naturally cling to any straw in order to save themselves. They will manufacture any story to suit the occasion in the hope that someone may believe what they say, and thus accomplish their purpose. An oath does not mean anything to them. The only thing that matters is the regaining of their freedom.

I am not saying the prisoners at the bar are guilty. I simply say if they are guilty how much reliance can you place in anything they may have said in their own defence? I will say without hesitation I was not greatly impressed with the evidence of the prisoners or their witnesses.

These are the things, I repeat, which makes it exceedingly difficult to bring out all the important features of the case without having the appearance of bias. Why should you and I reject the evidence of certain witnesses and accept the evidence of others? We do so because as prudent men we very often can size up a situation after hearing the answers of witnesses and observing their demeanor in the witness box. I will endeavour to explain more clearly as I analyze the evidence my reasons for such conclusions.

I simply want to say I will not shrink from doing my full duty as I see it by driving home every fact and circumstance for or against the prisoners as they appear or occur to my mind, without fear or favour, so that you may be assisted in arriving at a fair, just, and conscientious decision.

I repeat again, you are the sole judges of the facts. You may or may not accept what I have to say to you regarding the facts. It is your privilege to disregard all I may say regarding the facts and come to your own conclusion respecting them.

Evidence Received

Now then, gentlemen, there has been considerable evidence addressed here in this case. I am going into every circumstance in connection with it. I do not think there is very much mystery involved in this case. I don't think it is a difficult or intricate case. If there is any mystery involved it is the duty of The Crown to solve that mystery. It would never, never do for the Crown to point into the dark and say to the prisoners at the bar, "Unless you can throw light into the darkness you must be held to have engaged in crime." It is necessary for the Crown to throw light so that you and I can see without any difficulty. Gentlemen, I think the Crown have done their duty in that regard exceptionally well, and I want to say at the outset that the Police Officers who had charge of the proceedings that night are to be complimented and congratulated on the discharge of their duty. Every single officer took his life in his hands when he tried to arrest those prisoners now sitting in that box.

Why do I say that? You heard the evidence of Mr. Gregory and Mr. Munn. As Gregory went upstairs he was struck by a bottle something the same as this, and apparently it broke because liquid came out of the bottle. There is no evidence that it did break but he got a crack on the head that, according to the evidence of Mr. Sterns, completely dazed him. And according to the evidence of Mr. Munn this crowbar was used over his head. And he came tumbling down to the bottom of the stairs. He might very well have been killed. And what followed? When Officers Webster and Lund went upstairs what took place? Down came a chair tumbling. Well a chair perhaps would not be such a very dangerous weapon, but, following that according to Constable Webster, this crowbar was hurled down. These crowbars are here for your inspection. You can take them to your juryroom. Just pick this up and imagine that striking you on the stomach or on the head. If that happened to strike those men, I am satisfied that not one of them would be here to tell the tale. That evidence is contradicted by the prisoners, but Constable Webster swears that is the bar, or one similar to it.

But that is not all. Webster further says when he had this man Phillips after he was arrested and was taking him up near Grafton Street to the Police Station, what happened? He said, "If that gun had been working you would not have got upstairs." What did he mean? It only had one explanation. It means he would have shot him dead. That's the kind of man you are asked to believe when he comes on the witness stand and that's the actions the police officers were up against on that particular night. And I say they are to be complimented on the success which attained their efforts on that particular night. However, gentlemen, that is by the way.

Let me now deal with the evidence. I am going to deal with it rather extensively because I think it is necessary for your minds to be refreshed. We have been six days on this case and I know you could not be expected to remember all the evidence in that length of time. I am going to start from the beginning in chronological order, not as the witnesses came on the stand, because I think I can demonstrate more clearly every connection of the events so that you will have no difficulty in arriving at a conclusion

First Witnesses

Now, what has been the evidence in this case? I will start with the first witness, William Ryan.

He swears he lived across the way 40 ft. from the home of the deceased and on this evening, January 30th, he went into the store of the deceased about ten minutes to ten, and he made a purchase. I don't care whether he bought four caramels of eight caramels, but he bought some bread and it is true he got some change. He went in there anyhow around ten o'clock—whether it was ten minutes to ten or five minutes to ten, there is some little discrepancy about that but that is immaterial. He was in there and there's no evidence to the contrary. And when he went in there he found what? The deceased was not in his store; the bell on the top of the door was not ringing. That door after the tragedy occurred was examined and the bell was found not to ringing.

But in any case Ryan says when he entered the store the bell did not ring and he tramped twice on the floor to attract Trainor's attention because he believed the deceased to be in the back store or perhaps in the dining room in the main part of the house and in only a minute or two the deceased came out and waited on Mr. Ryan who made his purchase. He saw the man and at that time he says he was in his usual good health. It is true that he was an old man, as Ryan says 79 or 80 years of age, but apparently a strong, healthy, vigorous man, able to conduct his business. And then he said he got his purchase and went home. What followed? He said about ten minutes to twelve he heard a noise as of someone being hit, and that noise he said came from the back place of the deceased. It is true a man might be mistaken. He didn't describe what the noise was, I don't know—according to this witness the man was alive at ten o'clock, and at ten minutes after twelve he was dead.

Let me see, the next witness, Mr. John Gormley was a most observing man —he was able to give you the full details of what he observed there that evening; very minutely, carefully, and honestly.

What did he say? "I went in there at 10 minutes to 10 and when I went in there the deceased was serving a little girl and as I stayed there for sometime two other ladies came in and made purchases and then went out and then he began discussing and talking current events, talking about the Court proceedings and the deceased picked up the paper and was reading something from the Court notes." In any case they continued to talk together. He went in about ten minutes to ten and remainded till half past ten. But while he was there what took place? Just about closing time Mr. Gormley says what? He says it's the custom of that man to close at half past ten. Mr. Gormley knew the customs and habits of that man, closing around ten or ten thirty. In any case about that time the old man starts to close his store and he goes to his cash register and takes his cash out of his cash register. And he puts that, the notes and silver in a bag. The bag has been presented there for your perusal when you go to the jury room.

What further does he say? He took the money and he put it down on the shelf just before you go into the dining room. And then what next did he do? Mr. Gormley said he opened and he closed his safe. One would naturally think that the old man would have put his bag of money in his safe; probably he intended to do that, gentlemen, but let me tell you right now that that money placed on the shelf is going to play an important part in this case. Now what happened after that? He said the old man in his careful manner went out in the back storeroom and he put the weigh scales over the cellar hatch in order to make them safe, I suppose, for the night. Making every preparation to close his store, and then he said he came inside and went behind the counter and went down to the show window and took out some baskets of apples in order that he might pull down the blinds and close his store. And Mr. Gormley saw it was time he was closing his store. But there was something a little further that was going to play an important part. He says that he had been in the habit of of going in there frequently, two or three times a day. He talked to the deceased time and again; knew the methods of closing the store. He told you and described that not only is the door closed with a bolt but he says that he takes this bar and there's a hole in the bottom of the floor and that sharp end is inserted and the other end is put in the bolt on the top.

That's the method the old man employed in having his store closed. Was it that way that night? I tell you gentlemen, that's going to play a very important part in connection with this case as I will disclose in a very little while, in my point of view. It wasn't closed that way, it was just bolted. At least Gormley said that was his method. Now Gormley, just before he went out, asked the old man the time and he took out his watch (which was correct and accurate because the next day it was still going and was correct according to Dr. Pierce). He asked the deceased what time it was and the deceased says "Half past ten" and he said "Good Night" and the deceased said "Goodnight, Jack" and Jack swears on that night the old gentleman was in his usual good health. There for over half an hour talking with him and then he left.

There was a man who happened to know the habits and customs of this old man. It is unreasonable to think that if the prisoners were living in the City of Charlottetown, one for twenty years and one nearly that, would it not be that they would be observing before they would undertake a thing of that kind? Would they not know the habits of the old man? Men of that kind are always on the lookout making their plans —that's the history of things of that kind. I only throw that out. There's no evidence. Lund said he was never in that store. I am only suggesting. If people are wicked enough to commit deeds of that kind, they are going to prepare for it.

Constable Lund's Evidence

Now we follow along; the important witness in connection with the crime is Mr. Anthony J. Lund, the Constable. What did he have to tell you? He is the gentleman, or the constable, who apparently took charge of the affairs that night and he is to be commended for the excellent way in which he performed his duties. What's his evidence? His evidence is on the evening of 30th January last about ten minutes past twelve he came down Queen Street and as he got down to King Street he turned and he was accompanied by Police Officer Webster and as he got by Riley's Tobacco Factory they observed a man down at Pownal Street right near the home of the deceased. But the snow at that time was 4 or 5 feet high and all they could see was the hat of that man. They couldn't see who it was as he was some distance away. They couldn't tell what he had on or anything of the kind. But this Mr. Benjamin Gauthier could tell exactly what kind of a hat he had on and all the rest of it.

According to his story Gauthier undoubtedly heard about some man being there. The prisoners say that man was in the store; they saw him coming out. I suggest now that he was a lookout man for those in the store; and when he saw the Police Officers coming along he moved away. That's my suggestion to you. Anyhow, what does Police Officer Lund say? As they came along King Street they proceeded along till they came to the corner of Pownal and King and then they noticed at ten minutes past twelve while they were on their beat they looked up to the house of Peter J. Trainor in the upstairs window and they saw a light. They knew that was unnatural for the old gentleman to have a light at that hour of the night. Something made them suspicious because immediately they go to the corner of this place and they stand and they listen for a few minutes at the corner of the house, and then they move over to the door and what do they see, gentlemen? A light coming on downstairs, and the store blind pulled down which was up about one foot from the bottom. And then they go over and Lund looks in to the latchkey hole and he sees the prisoner Lund standing some distance from the door.

And then about the same time, or within seconds anyhow, he hears the cash register ringing and then immediately following that he hears someone inside, "The old son of a bitch!" or something of that kind. What did they mean? The prisoners say, "I wonder where the old son of a bitch is!" or do you think something like this was said, "The old son of a bitch has taken all the money out of the cash register!" I don't know of course, there's no evidence gentlemen, but both Constable Webster and Constable Lund heard that remark and they did not hear "Where is the old son of a bitch?" but "The old son of a bitch!" That's their evdience. Quite a difference, is there not? There are so many little incidents in this case. Straws sometimes tell the way the wind blows.

Conflicting Testimony

Now then, at that time both of those men say they tried the door and they couldn't get in. They put their hand on the latch and they couldn't get in. I am just bringing it to your attention because you heard only yesterday the prisoners say it was some time after that before they bolted the door. Do you believe the police officers who have no interest whatever in this case, or do you believe these criminals who are now charged with this offence? It is another simple incident but, in any case, Lund and Webster both say they tried the door and couldn't get in. I am going to put this question to you as sensible men. Do you think the Police Officers would be so silly as to not try the door when they saw Lund in there? It's a question for you.

Then what followed? Lund hit the window in the door with his flashlight and what happened in the instant? The light went out. Then they heard scurrying and the prisoners admit that themselves. Then the Police Officers saw someone coming along and sent word to the young fellow to phone, and as a result word came to the patrol car by radio and Constables Poole and Gregory arrived on the scene and at the same time Mr. Reddin and Mr. Sterns arrived. But before they arrived, Lund in his careful shrewd way of looking after things went around to the back of the house and through MacDonald's, the neighboring house to the south, he went through their home and at the back here he said the snow was from to five feet deep. No foot prints of any kind, through McDonald's yard into the yard of Peter J. Trainor. Fresh snow 4 or 5 feet deep; he threw his flashlight around and saw nothing further and then he retraced his steps and came back and as he came back those other officers arrived along with Mr. Reddin and Councillor Sterns, and just prior to their coming this witness Mr. Munn arrived on the scene because he relates the very same circumstances as Officers Lund and Webster.

All their evidence is corroborated from beginning to end by all these witnesses. Now what further happens? Lund still in charge goes back, I forgot to mention before he went around after he hit the window in the door and it didn't break, he took his flashlight and he broke the window in the show window—made a hole and stuck his flashlight in. He didn't break the window completely out; he just broke enough to pass in his hand with the flashlight and then he went around to McDonald's and came back and as he came back he met the other officers, but couldn't get in then. Do you think these men would be so foolish as to be breaking windows if he could get in the door? But the door was locked. In any case he broke the window sufficiently to permit himself and Webster to get into the store.

What followed as he got in the store? Lund immediately went to the door and he says he opened that door just by sliding back the bolt. That proves conclusively that that bar or instrument was not used that night. That, they swear, was never locked in the usual way as was the habit of this old man to do. I think that will play a very important part in connection with this case as we develop it.

In The Store

Now then, they are in the store. Mr. Sterns and Mr. Reddin and Mr. Munn and all the rest of them including young MacDonald, all go in the store, every single one of them. And the first thing Lund does is flash his light around the store; he doesn't see apparently any of these birds, they are not there, and then he goes out to the storeroom. He didn't go in but threw his flashlight through, just instantly, I suppose, and then he goes out into the main house and while he is doing that Mr. Ivan Reddin, —they are all looking around, naturally they are all curious because they were told what was going on, that someone had broken in. Officer Lund at the outset had warned them to be on the look out so those inside couldn't get out, so they naturally were curious enough to find where the culprits were. In fact, Webster says while Lund was around to the back of the house he put his flashlight up to the front of the house and saw a man, he didn't know who it was, but he saw a man upstairs in the window. Now then, as Webster and Lund were in that house, the main house, what happens? Ivan Reddin goes into the back storeroom.

What takes place? He saw the legs or feet of the deceased protruding a few feet beyond this table that was there. He gives the alarm. And what follows then? Councillor Stern goes in and he lights a match, according to his evidence; still there was no light in the back place there. He is about the only one who immediately recognizes the deceased. He saw the gaping wounds and he say the blood and he saw the upset condition of the place and he recognized Peter J. Trainor and immediately following Constable Lund and Constable Webster came back when the alarm was given.

Now then, while they were in there looking at the deceased, Constable Lund again gave instructions to Mr. Reddin to get the doctor and the coroner and the undertaker and as he was giving those instructions, gentlemen, according to the evidence, what happened? Now I am going to leave the constables who are in the house for a moment and we will see what happened outside.

Constable Lund said before he went in that house and when the Officers, Poole and Gregory, came along he immediately took Officer Poole to the backward through MacDonald's house, back of Trainor's and placed him there on the lookout to guard against any man getting out and he left him there and Poole himself says that's exactly what did take place. Poole says, "I went along with Officer Lund through MacDonald's house and MacDonald's back yard. Stepped over the fence and got in Trainor's yard, and there were just the footprints that had been made by Lund". "No other tracks", he said. And he stayed there.

And as I mentioned a few moments ago, Lund, instead of retracing his steps and going back as he had gone through MacDonald's house, went down that alley way between MacDonald's house and the home of the deceased and broke down a high fence or gate, smashed it down, and got out, and then he smashed the window in and got in the store. Now the connection is this in the story. Poole now is at the back of that house and on the lookout. The other officers are on the inside

They are looking to see what is happening inside and Poole is watching at the outside. While Poole is standing there he hears a noise on the northwest corner of the building, at the meat shop, and he took it to be some of the officers trying to get out, and he said "What are you doing there?" "Who is there?". He got no response to that. And then he heard running through that storeroom, racing from the storeroom, or in some part of the inside of the house in any case. And then he prudently takes the precaution of keeping close into the house so he couldn't be observed. That's his story. And then in a moment or two he hears a crash up above from a window. He says 12 or 14 feet high, and out comes the glass. And he sees the arm of this man Lund, the prisoner,

(Continued on page 10, Col 5)

MAKING THE TOOLS OF WAR

FEEDING THE GUNS OF AN EMPIRE

Shells by the thousands are pouring forth from this Quebec plant where a whole community of workers spent their days nonchalantly tucking T.N.T into containers destined to explode where they'll do the most good in scattering the Hun. In upper left a worker calmly pours liquid T.N.T. into anti-aircraft shells. In upper right may be seen stalks of Howitzer shells awaiting shipment overseas. The charming worker in the lower photo is finishing composite parts for anti-aircraft shells.

A new town has sprung up almost overnight in Quebec province, a town with its own post office, restaurants, hospital, fire and police stations, named streets, even an abbreviated railway system of its own, but no dwellings. The population cannot be given, but it runs to several thousands.

Visitors are not welcome in this town, nor are people anxious to visit it except on business. High, closely-knit steel fencing surrounds every inch of the townsite. Powerful floodlights illuminate the area to daylight brillance at night. Armed and uniformed guards carry on a ceaseless patrol inside and outside the fences. Every visitor must be in possession of passes signed by high authorities, and abundant proof of identify as well.

This is an explosive town, a $15,000,000 development that is a key place in the coast to coast jigsaw of Canada's huge munitions program. Millions of shells, thousands of bombs, will be filled with explosive in this town.

Actually there are two towns—a town within a town. In the outer ring are administration buildings, storehouses for materials, cafeterias, fire and police stations, and construction buildings. The inner town is separated from this outer ring by fences, and everyone who passes through the gates is subjected to an even more searching examination than at the main gate. Smoking is absolutely taboo in this inner town. Traffic regulations are strict. Under no circumstances may the driver of one vehicle turn out to pass another.

The buildings in the outer town are in orderly array, but those inside the second fence seem to be scattered almost haphazard. They are unimpressive, almost ugly, in appearance. Many are surrounded by concrete and timber barricades higher than their rooftops, solid retaining walls that hide the buildings themselves.

Behind these walls men handle some of the most powerful explosives known. They know the full potentialities of these chemicals and treat them with respect. The old saying, "Familiarity breeds contempt", does not hold true in an explosives plant. Rather, familiarity breeds respect and caution. A tiny infraction of the rules, the slightest bit of carelessness on the part of the worker, might endanger the lives of a score of more. So every worker automatically polices his fellows. For his own sake. he permits no carelessness on the part of his fellows and watches his own actions scrupulously.

One visits such a plant with trepidation, but learns quickly that the danger is slight unless someone becomes careless.

The visitor arrives in a division of the explosives plant. Before entering, he must produce his passes and credentials and sign a register. He then goes to the change room, where he surrenders to the attendant most of the contents of his pockets—matches, cigarette lighters, cigarettes and tobacco in any form, food, chewing gum, pocket knives, keys, nail files, sometimes even watches and coins. To make certain that nothing is overlooked, the attendant searches the visitors in expert fashion. He turns out pockets, feels along the linings of coats and vests, to make certain that no stray match or match is secreted amid the fluff which accumulates in the clothing of most men.

The visitor is then taken to a barricade, fitted with a metal stile. Signs indicate that the room on one side of the barricade is "dirty" the other side "clean" this is highly important. Mounting the stile, the visitor pulls on a pair of freshly-washed rubbers before he may step down upon the "clean" side of the barricade. If these rubbers as much as touched the apparently spotless floor on the "dirty" side, the visitor would have to change to a fresh pair before setting foot on the "clean" floor. The whole purpose of the precaution would be undone if metal or grit were carried into the "clean" section of the plant.

Workers in the plant do not wear rubbers, but leather shoes which are entirely sewn and contain no metal. They also wear long coveralls of grey flannel, which they don in the "change room" and discard before they leave the plant.

These formalities over, the visitor is guided along corridors which seem to stretch for miles, "walkaways" connecting with side corridors leading into separate buildings where various process are carried on. Some of these buildings are comparatively small, with thick walls, where dangerous operations are in progress. Others, where less danger exists, are as big as trolley car barns.

One series of buildings is reserved for the filling of aerial bombs. The steel bombs are unloaded from freight cars and stacked for preliminary inspections and a thorough cleaning, inside and out. The bomb is up-ended on a special cart and the big base plug is removed. A cardboard former for the fuse is then inserted in the nose end and sealed firmly in place with plastic. Another former is fixed in the base end for the second explorer.

The building where actual filling is done is three storeys in height. On the top floor is the steam-heated oven in which T.N.T., normally a granular substance similar in appearance to old-fashioned brown sugar, is melted to a liquid resembling maple syrup. The T.N.T. is mixed with another chemical in a machine which finds a use in domestic industry as a bread-mixer.

The resultant mixture is a yellowish- brown fluid which pours readily to the first floor through a combination of pipes. Here workers operate valves which allow the explosives to flow into the bombs; it pours slowly so that every crevice may be filled.

From the filling room the bomb goes to a department where workers tamp down the explosive with wooden clubs, smooth off the surface at the base end seal in in with plastic, and insert the base plug. After final inspection the bomb is ready for shipment overseas.

The tail assembly, a light metal framework that serves to keep the bomb in an upright position during its downward flight from the plane, is shipped separately. So are the detonating mechanisms, known as pistols, which explode the charge of high explosive. These are inserted in the bomb, and the tail assembly put on, by the air force armorer when he prepares to load the cargo of death on the bomber before it takes off. The bomb itself is comparatively safe for handling until the detonating devices are installed.