

CORONER'S INQUEST.

VICTORIA, TO WIT.

This Deponent *

on h oath saith, I am a

residing at

* Christian and
Surname in
full.

drive
~~draw~~ the powder to gauge - I do not see that it is necessary

it is none the better for being Kynoch's machine they had a blow
up a little while ago - the object is to ram the powder to gauge.

The machine we use is not so quick as this - I never used this

machine. (*Showing medium ^{face} working*) I daresay if I practised with it

I could do a thousand an hour .

You did six in fifteen seconds ? I have not been used to it . With a

buffer there you would prevent that end touching the guide, but

the centre *hit* might be made longer .

Kynoch ~~had~~ used a similar machine for years and the War Office also; if

they have found it efficient and proper, would you set up your ex-

perience against theirs ? No . I have had no experience of that

machine - I would not have it in the place . I have had 25 years

experience in my father's shop - my father has nothing to do with

the work part . I picked up my experience in the shop in Bourke

Street and I read a bit also . All I have gained has been under

my father, in his employment, and using *my* ~~his~~ wits . The machine we

use in our shop we imported from England - Erskine's people make

most of the machines in England for the private trade . I have

heard of Greenwood and Battley; they are the largest makers of ammun-

ition machinery in the United Kingdom . The design we use is Erskine's:

it is something like the trays that the Colonial Ammunition Com-

pany use . The cartridges instead of being placed in the top of

that are placed underneath, and they fit into the hole exactly .

You put in 100 at a time from the bottom you put the guide on and

turn it over so that the top comes up and the guide keeps them

from falling out . The cartridge shell fits this hole exactly - it

is not put in from the top . Then you put your powder in and you

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turn your paper down and you have a *board that goes on*
top of a wooden stick; it is all wood. ~~The~~ ^{It} ~~cartridge~~ has
 four rammers and you do four at once. We do the filling and the
 ramming at the sametime and in the same place. Our trade is small
 as compared with a factory - we do not make military ammunition,
 only sporting - I cannot say how many we fill a month - take the
 year, about 700,000 or 800,000 a year - men do the work at our
 machine. On the average there are two men working in the room -
 four in the busy time - we keep two machines going there in the
 busy times. We have about 5 lbs of powder within reach of each
 machine, not open - it is in sealed cans containing 5 lbs - no
 loose powder at all. When a man starts his work he opens a sealed
 can - he fills from a can, pours out as much as he wants into a
 copper tin of $1\frac{1}{2}$ lb - it is a bowl shape - it has no nozzle - he
 spills it into the top of the tray. The powder is poured into the
 tray - you cut it off and it falls into the shells. In the spaces
 between the cartridges there is no loose powder. I have never
 been inside a cartridge manufactory. When I describe our process I
 describe the process used by us in our own particular sporting
 business, and it is usual in the trade in Melbourne and anywhere
 else bar a cartridge factory. I have never been Home to England,
 but I know the process ~~xx~~ there - it is just the same.

Taken and Sworn before me the 28th day
 of October 1897 at Footscray.

J.W. Rosier Jr.

C. Cantley
 Coroner.

CORONER'S INQUEST.

VICTORIA, TO WIT.

This Deponent * Captain Richard Harding

on h oath saith, I am a _____

* Christian and
Surname in
full.

residing at _____

To Mr Box - I hold the Commission of Captain in the Defence Force of Victoria, specially mechanical engineering. I have been at that about fourteen years in the Defence Department - 26 years at mechanical engineering. I know pressing machines generally, and generally the operations required in making ammunition. I have examined this filling machine - it has been used for pressing - blank cartridges - I should say it is not the object it was made for - it would be hard to tell what it was made for. With the small amount of work required to press cartridges this machine is out of all proportion, that is in force. The whole machine is altogether out of proportion to the work required. I am designer, draftsman and engineer - I can design a machine to do the work required.

Mr Bryant asked whether gentlemen with no experience in cartridge manufacturing should give evidence about machines of which they have no knowledge.

The Coroner - They could take his evidence for what it was worth. If he has not had experience of these particular machines he could give certain principles - he is not an expert in that sense.

To Mr Box - As to a person using that machine as it stands to day, I think it is a very defective piece of work in every way - it is crude in design and dangerous. As Mr Rosier pointed out, this collar striking the metal and the ^{die} ~~over~~ striking this small bracket is in itself a very dangerous thing - it requires a washer in between and it should also have a limit of forward strike. This collar is adjustable - it should be so made that it should be adjustable to certain lengths but only to a certain distance forward. This bracket has nothing to do with the length of the

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Coroner.

stroke

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stroke - that should be decided by this stop here . That is made here to assist the operator to lay the cartridges into the hole ,and for this die to touch the bracket is a most serious defect in the construction of the machine . If an operator takes the length of the lever and puts a 20 lb pressure on there it means 5 lbs to overcome the resistance of the spring - that means 15 lbs effective here,that would give 60 lbs on the bracket. A blow should never come on that bracket - the stroke should be decided by this collar here (shown) ,and it should have a leather washer in between to prevent unnecessary friction at this point . This bracket should have nothing to do and should not touch that other bracket . The system of applying the spring is defective . No person designing a machine would ever think of putting the spring in such a position ,not to have a direct pull. Here it has been by some person tied roughly round a set screw ,so this is all in friction here. Every person designing machinery for powder should reduce friction of prominent points like this . No person acquainted with machinery of this nature would think of fixing it up with old boltslike these - very rough:every part should be so made that the powder or grit or powder dust would not come to parts where it would stick - it should be so made that it would go away . Instead of that everything seems to be designed to catch the powder . Say the operator put the case in here (shown) and pressed it down and attention is called away - it catches the piston and she keeps on pulling it would throw this cartridge out and throw the powder out . The resistance would be taken away from here (shown) it would strike here (shown) a very severe blow - it would strike with a quick smack that part which would be covered with powder at the time of pulling,

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whereas if the bracket were removed further away and the strain came on the washer at the other end there would be very little *danger*. Generally, all the fittings are put in such a manner that it catches the powder and there is this immense lever to do nothing really, because the *operation* of the machine is really 2 or 3 lbs - to place the powder in here ^(Pointing). I do not believe the person designed the machine in a horizontal manner - it should be vertical. Why should a man take a cartridge with powder in this way, horizontally - it should come in a natural manner pointing upwards. I heard it stated that Kynoch made the machine - I doubt if he made it to do the work. If he made it he is ashamed to put his name on it. The cartridge has a bit of paper in it when turned out. If you turn it up like that to put it in the machine certain particles of the ^{powder} ~~machine~~ must drop out at times. In any case the powder falls and takes up whatever space there happens to be here, whereas if it were in a natural position the powder settles in it - you cannot have a big blow on it because it would break the grain of the powder. If a girl does 1,000 an hour the blow that she would necessarily deliver would be *simply with a pressure here* of 6 lbs - that would give 4 lbs on the end of the plunger - 5 lbs to overcome the resistance of the spring, and it would still give 4 lbs here which you do not require to do the work required. This thing is made in such a manner that a girl working and not really understanding the affair would to some extent put her weight on, which retards the blow. You can see how much it is worn in the plunger, due to the unnatural weight ~~x~~ put on the machine instead of directly along in the line of the work to be done. As to how it is fastened on the bench, everything is against it I should say for its use.

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As to its use it is a very dangerous machine for anyone to use. The blow here alone is a most serious thing. That metal should never come in contact with the metal at that point (the bracket) That alone would condemn the machine even if it were under good mechanical supervision. If a person put 10 lbs on it to close it the delivery would be 20 lbs at the piston - that is the ratio all along; it is four to one - that is giving every favour to the machine. ~~There is no indication~~ ^{where} I see no indication of ~~whether~~ the girl was in the habit of putting her hand on the bar. If you design a machine for a certain piece of work you suppose it must be used at the end of the handle, otherwise your design is faulty, because you could have ^a the machine a half or a quarter the size and the lever in proportion. If the girl took it low down on the handle then that shows the thing is out of fair design.

To Mr Bryant - My business is engineer. I am Inspector of Ordnance machinery in the Government employment. I served an apprenticeship to mechanical engineering - it is not usual to give certificates for that. I have been 26 years in the Government employment - before I joined the Government service I was a lad. As an engineer I study and look up engineering works. As far as my practical experience extends I have gained it in the Government service. My duties are to inspect all the machinery connected with the Defence Department; gunnery of all sorts - breech loading guns, the disappearing gun, quick firing, small arms, Maxims, Nordenfeldts - I can take any of those to pieces or make them. If anything goes wrong with the Maxim gun I am called in to say how it should be repaired. I have men under me who can carry out the work, but I could do it myself. Assuming there is a machine gun on board the

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Nelson and while it is being worked a defect is found so that it will not do its work, the defect is remedied by those on board - by those who have received instructions from me to do it. If they cannot do it the gun is put out of action - I am not sent for, I am informed of it. I go down on board the Nelson or they may send the gun to my shop. I then overhaul it. I have no machine like that filling machine - ^{the} in Government Department they do not make small arms cartridges. I have seen the Colonial Ammunition factory, but no other. They had some filling machines at the Victoria barracks at one time - I should say it must be ten years ago - they were filling ball cartridges there - they were making up the cartridges - they would have about a dozen machines. They were used simply for putting the powder in and pressing it down and putting the wads in and making up the cartridges in the usual manner - that was all being done by the Defence Department. I had nothing to do with that, but my head quarters were at the barracks. Probably the machines were made of the same material as this. I would not like to say they were of similar design. It is a long while ago and I had nothing to do with the operation. With the exception of those machines I have seen ^{only} sporting ammunition ^{fillers}. I could not recognize this machine as one that was ever in the barracks. I have had quite enough to do to carry out my own work, and it did not come under my notice. I cannot say whether that machine was ever in the Victoria barracks. I would not be surprised to hear it is a machine manufactured by Kynoch and sold by the Government to the Ammunition g factory - the Government did not purchase that under my instructions. When those machines were at the Victoria barracks I do not know who was in control of them. All I can say is that

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* Christian and
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full.

(my superior officer) it
Colonel Cairncross is in control of the Stores and I suppose ~~they~~
would be under his control during the time it was worked there if
it was . As far as I know there was never any accident - at any
rate there was no inquest. I do not know how long the machine has
been at work at the factory here . As far as my criticism of the
machine is concerned I have practical knowledge of the work re-
quired . Except at the Victoria barracks I have never seen one of
those machines ,only the sporting . I have never superintended the
construction of any and have never given any special study to the
manufacture of small arm cartridge machinery. I have never, except
at the cartridge factory here ,inspected the machinery of any fac-
tory elsewhere . Assuming I am a fair minded man I would venture
to set up my experience ,my non-practical experience and my theor-
etical experience as against that of Kynoch and as against those
who have made a special study of cartridge manufacture . I have
no idea how long Kynochs have been manufacturing in Great Britain.
I know the firm - I cannot say they are the largest manufacturers in
Great Britain - I know it is a fairly large firm.

To Mr Box - If an engineer or draftsman is requested to design a thing
he naturally wants to know the work required ,and I ~~make~~ ^{take} my assum^{pt}
ion on that . To press a little paper in a case ,the work required
for that would ~~not~~ ^{not} be so much, ^{and} the whole of the construction of the
machine follows ~~it~~ ^{that} simply as a matter of *a calculation* -
you would have to consider speed and so on . In other respects
there is no special knowledge required to make a machine of that
sort . I say if Kynoch fitted those parts on he is very wrong, and
if he says the blow on that little bracket should be there I dif-
fer from him very distinctly ,no matter who he is.

Taken and Sworn before me the 28th day
of October 1897 at Footscray

R. Harding.

Capt.

C. Canby
Coroner.

CORONER'S INQUEST.

This Deponent* FRANCIS SAVAGE

VICTORIA, TO WIT.

on his oath saith, I am a _____

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Surname in
full.

residing at _____

To Mr. Box - I produce a copy of a letter from the Defence Department dated 13th. June 1894 (exhibit "J") to the Manager of the Colonial Ammunition Company. I also produce a reply to it (Exhibit "K") dated 18th. July 1894 from Captain Whitney to Commander Colling, Defence Department. There was a reference to Colonel Harman, London. He is the military adviser for the Government here and the other colonies. He made a report through the Agent General and a copy of that report was sent to Captain Whitney. The Department of Defence received from Colonel Harman a report a copy of which was sent to Captain Whitney. I have charge of the papers connected with the Defence Department. Colonel ^{Cairncross} ~~Collins~~ has made an estimate of the ammunition rejected from the Colonial Ammunition Company. All the papers connected with the rejected cartridges are in court. Colonel Cairncross is ill and cannot be here to-day. There are no other ~~box~~ papers in the Defence Department as to the use of sifted powder that have been communicated to the Ammunition Company other than those you have read. Copies of those you have read were sent to Captain Whitney.

To Mr. Bryant - As to a lot of Kynoch's ball cartridges that the Government had in stock they were converted into blank by the Defence Department in 1896. I can only tell what the correspondence discloses. I have no personal knowledge as to the cartridges. All I can say is that I understand that the conversion of ball into blank^K is a legitimate operation and that the Defence Department accepted Captain Whitney's offer to do it. As a matter of fact I cannot say

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Coroner.

that

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This Deponent * _____

on h oath saith, I am a _____

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residing at _____

that ^{after} the correspondence referred to between the department and Cap
enclosing
tain Whitney ~~including~~ Colonel Harman's report ^{no} ~~upon the~~ ball car-
tridges supplied by the factory to the department contained pow-
der formerly taken from broken cartridges. I cannot tell how many
millions of rounds have been supplied to the department since the
factory started. I think you might count it at a million a year. The
outside quantity has been one and a half millions a year. One and
a half millions is the limit now. Probably 15,000,000 cartridges
have been supplied since the factory was started.

(Signed) F. Savage.

Taken and Sworn before me the Twenty-eighth day
of October 189 ⁷ at Footscray.

C. Cantler
Coroner.

CORONER'S INQUEST.

This Deponent * THOMAS Harrington SMITH

VICTORIA, TO WIT.

on h is oath saith, I am a _____

* Christian and
Surname in
full.

residing at _____

To Mr. Box - I am draftsman and assistant surveyor in the Ports and Har-

bours Department. I made a survey of the explosion at the works. I

took the measurements to make that plan, ^(Exhibit 5) That plan as I describe

it now is correct. That opening is a portion of the floor destroy-

ed by the force of the explosion. The timber was broken up and s-

splintered, the joists of the floor and the flooring boards. The

walls were in some cases forced into the ground and in the outside

they were leaning outward. The wall was blown out just where I in-

dicate . The next length of wall was left standing. At On the north

side at the western end the wall was blown out, piles leaning out-

wards. Then the adjoining length of wall was left standing. That

is as I found it on the Wednesday after the occurrence. The scale

is 5 ft. to the inch. That is the north side of the roof that was

knocked off, weight 2,050 lbs. on the other side. This corner of r

roof broken having probably pitched on ground first. That corner

came down first. As to No. 2 the roof was bulged in there. The tim-

ber supporting the iron was broken and the iron bulged right in. I

could not say how that happened: I suppose it was from flying de-

bris. That cross-section shows the partition still standing. It is

7 ft. high. The walls are about 11 ft. high and the partition went

up 7 ft. The studs of the building are made of Oregon timber and

the other of ed ordinary match boarding. The floor was made with

iron brads in the ordinary way. I did not notice that the heads

were exposed. I cannot say it was secret nailed. That shows the di-

rection the trolly way goes as I indicate now. (~~Exhibit 5~~)

To Mr. Bryant - I have the weight marked on each of the two parts of
Taken and Sworn before me the _____ day

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at _____

CORONER'S INQUEST.

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residing at _____

the roof. I measured the timber on the roofs and calculated it from
recognised formulae laid down by the authorities. I took the thick-
ness of the galvanised iron. It is quite likely if you say so that
the *roofs* weigh about 1,750 lbs. ^{*actual.*} ~~across~~. The bulge in the roof ap-
peared to be done by some external violence. It may have been from
the corner of the roof that was broken: it is difficult to say.

(Signed) Thomas Harrington Smith.

Taken and Sworn before me the Twentieth day
of October 1897 at Rockaway

C. Cantley
Coroner.

CORONER'S INQUEST.

VICTORIA, TO WIT.

This Deponent* AMELIA REUTER

on her oath saith, I am a _____

* Christian and
Surname in
full.

residing at _____

To Mr. Box - I am forewoman at the Colonial Ammunition Factory. I have been working there ~~is~~ six years. I have been forewoman twelve months. A Miss Birkle preceded me as forewoman. She is not in the factory now. I had the supervision of the rooms No. 1 and the powder room, also the laboratory. The three girls killed were working in No. 1 room on that day. The day before the accident no one but Christina Jones was acting as powder girl. She had been acting as that for three or four weeks and no one else. The wages book shows that ~~she~~ shortly previous to this accident she was sifting powder in the laboratory. My sister Miss Ada Reuter was helping her at that. She was sifting powder drawn from paper blank, none from Martini-Henry cases. She has never done any of that. We have drawn the powder in No. 1 filling room. That is where I generally drew it. We simply lifted the paper from the top and opened them. It was paper blank, not brass cartridges at all. I have opened blank brass cartridges in the "sporting" room ~~before~~ the accident. I opened some two or three weeks before. In the fortnight before the accident there were not thousands opened in the partitioned part: I should say 300 or 400 at most. She got the powder from the paper blank. I should think there were about 30,000 paper blank opened and that was the powder she was sifting. I did not know it was a dangerous proceeding opening paper blank if it was looked after properly. I have read the regulations. When I first took the filling room I read some of them. I have read them at odd times now and again. Captain Whitney knew we were opening cartridges in the No. 1 room. I saw the regulation in

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No.

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(No. 53.)

VICTORIA, TO WIT.

This Deponent* _____

on h oath saith, I am a _____

* Christian and Surname in full.

residing at _____

No. 1 room. I expect the girls saw it. I never called their attention to it. I never called the girls' attention to the regulations of the factory. There were two copies of the regulations in the powder house and one in No. 1 room. I cannot say whereabouts it was. I believe it was the first time I heard the regulations ^{which} you read at the previous sittings. My attention was never called as to the regulations between the Crown and Captain Whitney. I never worked in a factory of this sort before. I have heard that the powder house was a "danger" building and the breaking up room. I mean by "breaking up" breaking up the brass after the powder is extracted. There is no danger if the powder is not there. There is no danger in opening cartridges. It is a mere matter of amount. Captain Whitney never told me that in the removal of powder from cartridges once used there was danger. I was not told that the fulminative caps might get into the powder. I never heard of such a thing. They sieve powder to get the pieces of paper and wax out. I have never seen ~~an~~ any grit. I have seen the sifted powder there. I have never seen any bits of steel... I do not know what you mean by "fulminate". I know it is in the cap and what the effect is if struck. We have a girl specially to clear the quantity of powder obtained by the drawing of cartridges, Miss Grant. She is not here and has not been at this inquiry at all. She generally does the bulleting in No. 1 room. She had ~~there~~ or four different operations. When she was clearing the powder out from No. 1 she always did it and I always looked after her. That paper box (produced) full was the limit of powder ever

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Surname to
full

residing at _____
Kept in the partitioned part. I have never seen it exceeded. There was no loose powder in the place when it blew up. It is all loose powder till it is crimped. The paper is the wad in the blank cartridge. It is covered when the paper is turned down. I say that a cartridge is as safe with the paper turned down as with a wad on it. That is the practice of the factory. I took the loose powder out of the partition in No. 1. We were not doing any of that in the week before the accident. We last opened cartridges in that room two or three months back. I had opened cartridges in part of that room where the girls were working in No. 1 room. packing it into a box and then taking the box into the partition part. There would be always a certain quantity of loose powder in No. 1. I have drawn sporting cartridges in the partitioned place, not in No. 1 room it self. Miss McLeod had been pressing cartridges on the Wednesday. I have no idea how many. I removed some out of the room the day before, I should think about half a barrel. I removed some between Eleven and Twelve. She did not go on pressing all the afternoon. She was turning in as well. I did not empty the barrel on the night of the Wednesday. I do not think there were any in the barrel on the morning of Wednesday when she began. There would be a fresh barrel put there in the morning. I do not know whether there were any cartridges in the barrel on the Wednesday evening, there may have been. She went to work on the Thursday morning pressing cartridges. The powder used in those cartridges was not the ordinary blank powder. I mean the blank powder as delivered from the magazine. I cannot

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say

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* Christian and Surname in full.

residing at _____

say whether it was "R. F. G. " No. 2.If it was not it was not sift ed powder,I am sure of that.I do not know what it was but was pow der given to me by Mr. Anderson for blank.It was not new blank. Ie do not know what other powder there is other than the three kinds mentioned.It was not sifted powder but I do not know what it was. I know I had never sifted it.It is easy to see the difference be tween blank powder and sifted and between blank powder and "R. F. G. 2.".Miss Jones got the powder and was loading the cartridges and would therefore know what powder was running into the cart ridge.If she says it was sifted powder I know it was not.I do not know what it was .I only know what it was given to me for. There were no cartridges in that room containing sifted powder as far as I know on the day of the accident. The cartridges in the room were ball, between 30,000 and 35,000 and blank 2,000 to 3,000.That is blank not crimped.There would be cartridges under the bench in a barrel below under the machine about 400 to 500. She was not stea dily on that work for an hour.No cartridges had been removed out of the barrel that morning.We never keep more than about 1,500 at the most that I have seen in that barrel. There was no regulation as to the quantity there. There were some sporting cases in that room.Some had powder and some had not.I have no idea how many had. Two hundred of smokeless powder and about 300 blank powder,that is finished cartridges.In the middle of the room there were also un choked cartridges,one barrel, about 2,000.From my knowledge there

were no cartridges in that room that contained sifted powder.They Taken and Sworn before me the _____ day

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residing at _____

could not be there without my knowledge. As far as I know all the cartridges in the room did not go off. If we used sifted powder we should work them through that room. About a day and a half before the accident we had been using sifted powder putting it into blank cartridges.. Before the accident we had removed all those cartridges. If there were 300 rounds found afterwards containing sifted powder not exploded I cannot account for it. I cannot say how many pounds of powder were in the room before the explosion. Prior to the accident we had no cartridge cases in which the powder had been exploded. If they were found there after the explosion the probability is they exploded when they went off at that time. I never instructed any of the girls to wear prepared shoes in that No. 1 room. The only place where they were worn was in the laboratory and the powder house. I never warned the girls about taking matches into the room. I never had them searched or told them they must not take matches. In the factory the girls did not get tea. They bring their own tea and get the water in the main factory. They did not bring their tea into No. 1 room. They did not wad in the No. 1 room except in the sporting department. To get there the cartridges would be carried through the whole length of the room from the powder house. While they were passing through the room they were uncovered. I never knew a girl dropping any. The sporting cartridges were loaded with powder in the powder house, never in that room or in the partitioned part. No cartridges were ever powdered there

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full.

to my knowledge. I kept the powder book in No. 1 room. It was never taken from that room to the office. It was to show how much powder I received. ~~from~~ Mr. Anderson checks it every month by what he brings from the magazines. He comes into the No. 1 room to check it. The truck from the main building used to be pulled into that room. There were cases and bullets on it. The one that came out of the factory was the only one that came into that room. They used to carry the cartridges from the powder house to the partitioned off place. The girls were not to wear any special dress in No. 1 room. Number 1 was sometimes cleared out altogether. I should think it was cleared out three or four times before the accident. There were no paper cartridges in that room on the morning of the accident to my knowledge. We had removed a lot of powder there from the cartridges prior to the accident. Miss McLeod was paid for pressing cartridges by the piece not daily wage on that. Of course, the more she did the more she earned. I cannot say how much sifted powder has been used in the factory during the three months before the accident. I do not think anyone can tell that. They came into No. 1 room with their ordinary boots on. I never heard that the use of sifted powder was forbidden. They used it up in the factory. They never sifted it except what was drawn out of the old cartridges, as far as I know.

To Mr. Smith - As to the system of fines, they were fined for talking very often and for being late. That is the only things I have myself fined them for. I have not heard of a girl being fined for

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Coroner.

CORONER'S INQUEST.

VICTORIA, TO WIT.

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on h oath saith, I am a _____

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Surname in
full.

residing at _____

running away because there was an explosion of a cartridge. If there is a fine I did not keep the fine book. It is kept in the factory. Mr. Anderson has the charge of it. It would indicate correctly all the fines that had been imposed from time to time. I have never taken exception to the dress of any girl in that room nor examined her boots to see if there was grit on them. I did not think it my duty to do that except in the powder house where they wear shoes. I have never seen any loose powder about the floor of No. 1 room. I should not think it possible. I do not think it possible for powder to be spilt in small quantities in that room. The last time I saw Miss Fitzpatrick was about a minute before the accident. On the day before the accident I saw her about closing up time, half-past Five. She was engaged in cannelling. There were some cartridges strewn about the room. I should think there were between 30 and 35,000 and 35,000. There was plenty of room for her to move about and pass backwards and forwards. There was a wedding to which the factory girls were invited. I was a guest. I got away early on the Wednesday sometime after Four. I see I made a mistake. I could not have seen her at half-past Five. My memory is as good as that all through. I have not had a conversation with Miss Christina Jones subsequently to the accident about the accident. It is my duty to oil the pressing machine. I also clean it. I did it the day before the accident. I had not read the regulations read by Mr. Box but I have the other regulations. I never heard that Miss Fitzpatrick had an accident with the cannelling shortly before the accident or at any time.

Taken and Sworn before me the _____ day }
 To By Mr. Box - After the explosion I thought it was a report by the cap-
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capping machine and I turned round to see if the girls had stopped the machine as they ought and as I turned, a piece of the glass struck me on the side. I was in No. 2. Then I ran to the laundry between No. 2 room and the packing. Then the girls came running out of No. 2 and I saw they all got out and I met Captain Whitney. I do not know what he said as he jumped off the landing. I did the same and I stood there till he called out for water. I ran along then into the factory and when I got there I found there were four or five people getting water. I rushed back again and I got back to the door leading to the filling rooms. I saw Captain Whitney placing Miss Greenham on the landing. I went to the filling rooms again and stopped the capping machine. Captain Whitney called out to clear the powder house. I went down then and cleared it. I found there about from four to five pounds of "R. F. G. 2" powder in the powder bin and some empty ball cases and three or four boxes of blank cartridges powdered. That is all. I found no sifted powder in the powder house. The powder I took out of the bins was "R. F. G. 2". There was about half a pound of the blank powder that she had been using. I took the powder to the laboratory. There was no sifted powder there. When I cleared the powder house I put it in the laboratory. I do not know whether it stopped there. I did not put any sifted powder in the laboratory. If sifted powder was found in the laboratory I cannot tell you how it got there. There is only one shot to each bin. There are three bins. I did not empty all the bins. They

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were not using one. Only twb had anything in. It was all "R. F. G. 2" and what we had been using for blank. It was not the ordinary blank powder. It was a powder that was neither blank nor "R. F. G. 2." I removed about half a pound of that. ~~They had been using that for filling-----~~and put it in the laboratory. That was the last of that powder. There was no more in the laboratory. I got that powder for blank and I did not remove more than half a pound of that. They had been using that for filling blank cartridges the day before. Miss Jones put that powder in the bin. She could get it only from the laboratory.

To Mr. Bryant - The difference between blank powder and "R. F. G. 2" is one is bright and the other dull. I think it is called "R. F. G. 2. blank" and the other "R. F. G. 2 ball". The powder I cleared from the powder house on the day of the accident and the day after was "R. F. G. 2" and the balance half a pound of other powder. The powder was not sifted and not "R. F. G. 2". It was not the ordinary "R. F. G. 2." blank that we get. It had dust with it. That was the only difference from the "R. F. G. 2" blank. That was the powder used the day before in powdering the cartridges that were being pressed. I took no sifted powder from the powder house at all and saw none in the laboratory when I took the powder over. I did not look particularly. I was in a hurry and was excited. Captain Whitney told me to clear the powder house to remove any further risk. I was in the No. 2 house when the first explosion occurred. I thought

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that a cartridge had gone off at the capping machine. It was like the explosion of a single cartridge. That was followed by a larger explosion in four or five seconds. I turned round towards the capping machine to see if it had been stopped. That is the direction given to the girls. If a cartridge does go off in the capping machine there is no risk. There is a chimney up which the bullet goes. I had just time to turn there when a piece of the glass struck me. It came through the window. Although the time was short there was a distinct interval between the explosion of the one cartridge and the bigger explosion. I was through the No. 1 room that morning and had given the girls directions what to do. The explosion took place about half-past Nine. Before that I had been through the No. 1 room. I had just come from it. I went there just to see if the girls were doing their work right. I had been in there before that morning. I was in and out at least a dozen times that morning between twenty minutes to Eight and half-past Nine. It is my duty to go round and see that the girls are doing their work. No one was at work in the sporting division nor the partitioned part nor the powder house. The three girls killed were the only ones working there. Miss McLeod was pressing at the pressing machine. Miss Fitzpatrick was canneluring and Miss Greenham bulleting and they had been doing that all the morning. The cartridges that Miss McLeod was using that morning came from the partitioned place next the powder house. Over night Miss McLeod had been doing the turning down. During the afternoon of Wednesday ^{she was turning} she was turning down and also pressing. The supply she got

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to work on on the morning of the accident. were what she had turned down the night before and then she turned down some more and started pressing again that morning. She would turn down three or four boxes of 100 to 120 before pressing. At most there would be 300 or 400 rounds in that room turned down and pressed. Some cartridges had come from the powder house that morning to the partitioned off part. Miss McLeod had taken them there. Miss Jones would give them to her. She would not go into the powder house unless she put her shoes on. I can understand that regulation thoroughly. About carrying the matches and lights, there are regulations about that posted about the place and a big notice outside the main door of the factory. They all come through that gate. They are bound to see it and everybody knows it. The sifting powder is drawn from the paper blank cartridges drawn. There is a difference between drawing the powder and breaking up a cartridge. There is no danger in the case of the brass cartridges, in breaking them up if all the powder is taken out. If some is left in it would be dangerous. It is done with great care and the work is checked before being sent away. The cartridge cases are examined before they are removed. The work is constantly passing through different hands and so gets examined and from that fact very great care is exercised. In the sporting part of No. 1 room brass cases have been opened and the powder drawn. That was done last before the accident about two or three weeks and then only 200 or 300 were drawn. The cases were

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left in the sporting room. In addition to those in the room there were sporting cases in that room, about 10,000 empty. There were some blank also in the sporting ~~reemplace~~ crimped, finished, 8,000 to 9,000. There were also some old sporting cases empty, I cannot say how many, old cases that had been filled once. , about 2,500, a barrel. There were also some heads of cartridges, about 5,000 with the caps in. I think there would be more than that. I should say about 30,000 completed ball cartridges, 2,000 to 3,000 blank cartridges not crimped with the powder down at the pressing machine. Then 4,000 to 5,000 were under the bench where Miss McLeod was working. In addition to those there were 18,000 new brass cases unfilled. There were no paper cases unfilled. In the other room, the partitioned off part near the powder house they were all turned down and not more than three boxes containing each 100 to 120. They had been completed in that room. The capping was the last thing done. The 30 to 40 ball cartridges in that room were some capped and some uncapped. I cannot say the proportion of each. When a ball cartridge is capped it is completed, all except examination. When a ball cartridge not capped is next dealt with it is capped and then it is complete. As a matter of fact cannelling is done after capping as well as before. There were capped and uncapped ball cartridges in the room because we had been working up the hand capping. Miss Fitzpatrick was cannelling no uncapped ones. In the ordinary course of events the capped ball cartridges were being

~~Taken and Sworn before me the~~ ^{day} ~~is used into the examining room, the~~ partition off No. 2 filling boom. I had oiled the machine the day before the accident. I had not

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worked that machine myself except showing a girl how to work it. It is in the same order now as it has been since I have been there. To my knowledge there has never been an explosion with that machine before and it has been in use the six years I have been there. I cannot say how many millions of cartridges have passed through it. Captain Whitney knew I was opening cartridges in No. 1: that was two or three months back. That was when we opened the 30,000 (Describing the process of opening a blank cartridge) I open the top and pull the paper out and shake it into a box. The paper goes into one barrel and the case in another. Five to six cartridges would about fill this little box. It is never filled right up. When it is about full it is taken to the partitioned place and put into a larger box and then it goes back to the No. 1 room. No one else is in the partitioned room at that time and someone is assisting her in the No. 1 room. Each would have a little box of that kind in front of her. The larger box in the partitioned room would hold three or four pounds. When that is reasonably full it is taken down to the powder house. As a matter of fact when the drawing of powder took place three months before the accident that process was adopted. I saw it done. In drawing that powder there would be no grit and no steel and no fulminate. If the ^{turning down} drawing is properly done in the blank cartridge before it is pressed in the way the expert girls do it the powder is completely covered up. After that turning in is done and the powder is pressed in the pressing machine the next process is the checking or crimping. The

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powdering