

think he has saved himself by
from cancer

see content and miss the whole
ask what is Radium? How
will you get all that ore across
1000 miles of country without roads
or railways? The hopes collapse

3.) ~~What is the next best way to get the
ship to Europe, probably his lunch
stand under one?~~

When he realises ~~nothing~~ he
can not do anything further
he accepts scholarship for study
in Cambridge England and is
packing his trunk ~~at~~ when his
trunk drops in; speed of
pitched scattered across table.

What are these yellow spots?
he asks, "Why that is gold"
not in the "least interested".
Forward the 8 gouts forward plan
to use the gold content to hire
engines to take the enterprise
of transporting the ore ~~from~~
across 1000 miles by airplane
and as a by product produce
Radium. expects a picture
of Ra 1000 \$/lb only 1000
will turn out to use it.
Promises to take water into

here repeated does not trust
mythologists leaves unlearned

3.) Boat meets ~~at~~ ^{at} ~~good~~ ^{good} ~~prophetic~~
~~the~~ ~~looked~~ at architectural garden

4.) ~~that~~ ~~off~~ Work done first
was to see solvent ^{Bartholomew} ~~Watts~~
~~interference~~ small old library
of East the Park and purchases up
minutes of old meetings 1830
tells asleep ~~instead of~~ ^{plans}
rounds gradually crystallizing
~~was~~ voices & fundamentally days;
Garry Bartholomew is here from
Manchester I thought we might
ask Binner to talk about this
~~at~~ ^{in Birmingham} experiment of his & another
voice say do you take that seriously
those experiments seriously & good
voice I do not know what to think
about it, would like to hear what
Bartholomew thinks & more voices
gradually ~~from~~ ^{is} ~~from~~ literary
& slightly transformational student
chairs are replaced by able
performance particularly and old
sunbreeper ~~into~~ ^{of} lights gas
~~transformed~~ ^{whims} on any black board
chalk & Bartholomew's looking

(3)

Admiral Rutherford also forwarded
came in with my Rutherford
from or with other people
struck on among them
Beyersell and from there came
his assistant. Introduction
~~from~~ Beyersell is asked
to talk. He says: I have really
very little to say. ~~I find that~~
~~both of it~~ It seems that with it
Hermann with some sort of radiation
which can blacken ~~photographed~~
~~plate even across black paper or~~
~~in a metal case~~ even if the plate
is wrapped in black paper or enclosed
in a metal case. Only X-rays can
~~do so for the only radiation which~~
can do that are X-rays. I do not
see how we can emit X-rays
and go on as having this sort of
thing. Where does the energy come
from? I do not know.

Rutherford asks? How are you sure
that your U was pure, could it not
be that it contained some impurity
and there was some chemical
reaction going on in your mixture
which would supply the energy and
produce X-ray, surely that would

(4)

make the whole thing much
less mysterious? Biquard says
I made my rings as pure
as I possibly could and it still
showed penetrating rays, of course they
were not absolutely pure but I do
not think the rays can be due to a
chemical reaction. Bismarck says
I think Mr Biquard is wrong
as a matter of fact I know that
he is wrong when he told me of
his discovery. I tested some
very pure Uranium a piece
of it which he had at showed his rays
all right but it showed them much
stranger ^{unfortunately}
than ~~pure~~ his on
called pure uranium, obviously
it is a chemical reaction between
uranium and some impurities in
the platinum. — The chairman
says that does not sound so
good Mr B. Does it, but
~~not the last repeat your case~~
Shall we now go and look at
these plates? Biquard says
will you come this may please?

(2)

5

They stroll out with exception
of Mrs Curie and young Rutherford
Rutherford asks do you think
stronger argument is ~~can~~ conclusive
She says no. I have been wondering
if ~~possible~~ contains some other
element which has even stronger
says than it. ~~On what at~~
R. what other element ~~is there~~
I don't know, some ~~is~~ known
element. R. What would you call
it if you found it Curie I would
call it Radium - they follow the
others out of the room the
room plunges in ^{semi} darkness

There are noises outside where
is this you men from Canada
He is in the library now; the
room lights up, modern pendant
electric light. ~~Is that~~ ^{young} ~~very~~
informed & ~~Here~~ explains he
is on his way to Cambridge, wants
to find ~~optical~~ Radium? ~~Do you~~
~~want to meet at once in Cambridge~~
How do you want to meet it?
I do not know! ~~Is that~~ shows him ~~from~~
~~Robert~~ ^{of R} explains electron
cannon, wishes look.

(6)

Butlerford's Laboratory

~~here explains idea for a theoretical~~
~~Radio~~

How works in the background
in shadow of big Adam smashes
Students in foreground just about
to leave Student A shouting we
are carrying them No well stay
for another ~~hour~~ Student B
What is he doing all this time anyway
A finishing up and see if the
smashed element becomes radioactive
B Does it? A No B Why does he
think it ~~should~~ ^{does} A I asked him
that one before, he says why
no I think it does not probably
out of the window - say here comes
the Cracastle - lets go I want to
be in time for my date. - Exit
Enter Butlerford crosses to a
cageboard takes out an instrument
on his way back sees them - What
are you doing here so late isn't the
day long enough for work x - I can't do
much work during the day so, this big
machine is running most of the
time and it interferes with my men
while it is on. - Sorry we can't have you

P

4th I have a counter here
which is sensitive to electron
voltat uses it all the time

I got it ready today
demonstrates counter

R Nice work. Well good ^{and} but
don't be disappointed if you
spend nothing.

Next day ~~Today~~ Here more than
~~100~~ ¹⁰⁰⁰ marshers the students
in fore ground. A. Hells Bolt
~~me switch off~~ Boy Ben is off
you can go ahead. Here Come
over here want to show you
something. A What is this Hero

This is a counter. It counts elec-
trons, - Here is ^{tiny} ~~mesh~~ ^{Beetle} ~~Beetle~~
^{the} of electrons if you take it away
and I switch on the counter

1... 1...
He switches on the counter: it sounds
like a machine gun going
off nothing away, Hero looks

puzzled and helpless, broad
 grin on face of all present.
 Now it worked yesterday in
 the A. Well I must be off
 I am for appearance ~~leaving~~
~~leaving the city~~ talks looking
 morning home sir.

Students in Foreground A looking
 out of window! Oracole coming
 R Kenders to her I hear you &
 are having trouble. He I can't
 get this counter working for two
 months now every day it is always
 all right in the morning and
 in the evening ~~sometimes~~ sometimes
 it is all right but usually it
 sounds like a machine gun
 Students have gathered round
 them ~~immediately~~ switch off the isolation
 with you? The switches on the counter
 sounds like a machine gun all the
 time ~~the~~ with broad grin then return
 Say only about you run over
 to Paris and see if Joliot has
 some secret that will make these
 counters work. If you leave to-
 morrow you can be back for the

60

Grandest dinner. Haven't
yet finished I will go. -

Isolat laboratory

I sitting in front of a camera
Here is what is in x

I Hello how are you, glad to see
you. That was a very nice
paper you sent me, what boy
~~on~~ ^{the} ~~not~~ ^{your} ~~name~~? H. I am having
some trouble with counters
thought may be you can give
me some advice. I am not
~~any more~~ ^(me) ~~using anything~~ ^{about counters}
~~that I can~~ & they are plain
carriedans, Now take ^{just} look at
~~this one - Point together -~~
~~for instances~~ It used it in all
sort of experiments; ^{it yesterday} was a
good counter, Now today see
what it does. I switch off
the bombardment that cuts
off the electrons but the counter
goes on as if nothing happened.
Then after a minute or two
it goes down. ~~It should~~ I
know it runs ten times it
always plays the same trick &
I was just about to test it
with this ^{radiation} ~~bombardment~~ ^{experiment} ~~crapped~~
you can ~~help~~ ^{send me a hand} ~~me~~ // Put's counter
~~an~~ another cable test. ^{Lives with}

11.

seems to be all right now. Let's
try it again over there

they try it in silence & same
performance Neither of them
speaks; they look at each other
in silence & then removes counter and looks
at ^{it} ~~at other table~~ ^{stands} to pace up and
down. Then ~~tests counter again~~
Shrugs to Tolstoy counter as O.K.
~~It's plain~~ ^{It's surprising} Tolstoy suddenly
stops in front of him
rather excited by God bless
what it is! He looks puzzled
J. Sant you see it? The radio
clearly you have been searching
for, ~~but you see what is~~ ^{can't you see}
~~impressing~~ - explains - with
a few words. Then ~~they go~~
looks toward ~~the~~ ^{these} ~~table~~ ^{table} ~~there~~ ^{there} smoke

R. Groom R. Gruffy voice

R sits at his desk, then gets
up and leaves room. Telephone
rings. R reenters room - ^{Richard's phone} that's
Jan Walter, always when I am
in town this telephone rings at
it is mostly Jan. E. - Richard -

it is just that I do not see
a discovery when I see it.
~~That I have certainly under your~~
~~nose and you had not~~

R. You certainly missed it
and in stock I go old I
Matthia bla Canada missed it New
Ireland missed it the whole Brotherhood
Empire missed it Matthia serves
Now you tell me more about it

Students

B Where is Bill He is all worked
up about this discovery of ^{the} ~~plutonium~~
he telling the Council all
about it, has been with him for
an hour ~~so~~ by now &
so Bill will have his share
Radium after all and ~~every~~
~~every~~ every country that is in
in Canada will ~~his share of~~
~~has~~ ~~have~~ its Radium and plenty
of it. I ~~hope~~ ~~have~~ ~~broken~~
You do not see these colored
(doctor) Why there would be
any more death of Radium
in Canada than there

from cancer in the ^{intestine} Bowel

unpainted * Blimp Jan says
let your imagination run away
with you ~~beach~~ ^{the boat} ~~the boat~~ ^{the boat}

with you
can't work so long he

who escaped from the Medical
~~hospital~~

can't work for him he
is an M.D. & he does not believe ~~in~~
that anything can be cured. ^{He believes in recovery} He thinks

is an M.D. & he does not believe ~~that~~
that anything can be cured ^{He believes in recovery} ↑ He thinks
the ^{above} medical profession is no success

new person Addison's disease
Kupfer's disease in disease he

~~is~~ want to be satisfied with the above
as much as Michael's disease & I tell you

Jan produce your Radium and let you
take care, in to this lunatic asylum

of the rest. —
You fellows ^{make me the} ~~make me the~~ ^{with you new} ~~are really~~ ^{who do think} ~~friends~~

how much he did solvent produce
the milk with at a molasses &

Have much could this washing
here produce it if you will please

day and night maybe 1 person
will grow much wiser about

and saw much more about
cost only 10 hours as much

as real rationing & that's Boll's
cheap rationing.

Q: What does Bull say?

2.

What does this mean?

Q. What does "sell" say?

C.) Bill says may be membranes
 could be used to smash atoms
 and produce order. Ra.

B. That is hardly likely in ~~doing~~
 they can where do you get
 enough membranes from. Being
~~the answer is you can't.~~
 That is just it you can
 not. ~~But~~ C.) Bill says may
 be you can produce it by
 a chain reaction. Got by
 what C.) He says may be
 same element like Radon or
 Protactinium or Uranium may
 be may be it will just
 fall apart the atom
 when it is hit
 by a neutron and perhaps
 two or three neutrons will come
 off; then these new neutrons
 will split other atoms and
 you get 4 or 6 neutrons and
 if you have a large mass
 of lead or something you
 can get as many neutrons
 as you want. ~~over and over~~
 And artificial
 Radioactive ^{as much as you want} well ~~there~~ you can
~~! anything~~ ^{! anything} ~~any~~ ^{any} ~~forster~~ ^{forster} and ~~perks~~ ^{perks}

C.) Bill says may be membranes
 could be used to smash atoms
 and produce order. Ra.
 B. That is hardly likely. In saying
 they can where do you get
 enough membranes from. Being
~~the answer is you can't.~~
 That is just it you can
 not. ~~But~~ C.) Bill says may
 be you can produce it by
 a chain reaction. Got by
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 be may be it will just
 fall apart the atom
 when it is hit
 by a neutron and perhaps
 two or three neutrons will come
 off; then these new neutrons
 will split other atoms and
 you get 4 or 5 neutrons and
 if you have a large mass
 of lead or something you
 can get as many neutrons
 as you want. ~~over and over~~ And artificial
 Radioactive ^{as much as you want} well ~~there~~ you can
^{! anything} ~~any~~ ^{forster and fuchs}

produce power, enough
to move a boat across the
ocean And he says -

A. hold him hold him
they hold him.

A. As Bill telling all this
to Ruthertford

B. I do not know but if I open
the door you will see this
door, ^{and if you see} the Cracovles office
~~then~~ ^{being open} in a manner
~~and the Cracovle chasing~~
~~after Bill in the corridor~~
Bill rushing out running
for his life and the Cracovle
chasing after him along
this ^{corridor} ~~very corridor~~ ^{opens}

~~The door looking down~~
~~on the corridor and clearing~~ ^{out of}
~~himself out of this~~
~~garage which is located~~
~~in front of the hotel~~
as the only immediate labor
you will then know that

Bill has ~~talk~~ spoken
of his ideas and has received
Rutherford's answer. —

~~The~~ door opens: Bill comes out
and strolls slowly along the
corridor making like in
dream.

For Bill is it true that
you want to work on a
~~chain necklace~~ think something
like a chain necklace is possible
Yes. I want to work
on it; What does Rutherford
say to this? There was
no time to tell him
perhaps I can talk to
him after the lecture

Lecture room

speaking

This discovery of isotopes
is of very great scientific
importance. I have sent
him a cable today and
asked him to talk to us
next Friday. I want you
all to come and hear him
and give him an audience

There are smothering the
8 chemicals

~~Unfortunately the discovery~~
~~is great as the substance for~~
~~the discovery is it has~~
It will take the ~~chemists~~ ^{some years}
to make up to these things. —
This morning I went through
some little calculations. It does
~~not seem that this discovery has~~
When I first heard about ~~it~~ this
morning I thought that ^{it is} it may
be possible to make out enough
to replace R. but since then
I have made some calcu-
lations which are not ^{at all} ~~uncertain~~
in this respect. ~~It is not~~
~~great as the discovery~~ Revolutionary
as the discovery is, it will not
be possible to produce these
new element in great quantity
and whenever talks of producing
energy by such methods
is talking moonshine. —
~~I have nothing~~

Moonshine is a beautiful
thing in its place — ^{in the field of} ~~entirely~~ ^{chemistry}
The walls of the laboratory
will fall. — Cheer. —
Students leave. — About some
of them among them Blondes

surround R. waiting to
speak to him. - Bill at
same distance heretakes...
He goes down half way
then stops turns round
takes his hat comes back
takes his hat and coat
and leaves. —

Remain alone and R
Blong

Told Bill talk to you about
his idea of a chain reaction
R. No. What is a chain
reaction where is Bill. Blong
I do not know he was here
a moment ago. - He has
some crazy idea that neutrons
~~the~~ can produce may be
swallowed by atoms and become
radioactive, does not seem
to realize that neutrons
pass through brick walls
and every thing. Told him
I swallow my hat if he
can make atoms swallow
neutrons. R I would want
not be too sure about it
if I were you. What is
by a chain reaction? ~~that he~~ ^{long}
mean

~~I remember what Bill~~
~~means by clean meeting.~~
 What is this ^{talk} about main
 meetings?

Synopsis.

Bank - first second meeting
 talk about Korm

Can proceed meeting bank
 Father meeting Daughters
 Hotel Room talk at with Can
 proceed about business. More says
 will go to Washington need
 introduction to ^{W. J. P. Smith} ~~Smith~~

Washington Buildings

- 1) L. Korm Smith
 - 2) 900 talks father
 - 3.) Records ~~W. J. P. Smith~~ Paper of M.
 - 4.) Second interview Smith
 - 5.) Gene in lab. letter from H
- ~~up want to see Smith. Wants good~~
 cables for Korm discovery
 planned to go to Smith see's good -
 crash - Brown refuses to receive

Next Day.

Came in lab with Blamp
 came with Head of Dept.
 adds one sentence to report,
returns to lab binds reporter

Perrin's lie name Blimp talks
 to reporter

Next day
the week

Chairman sympathetic / does not
 understand as much, misinterpreted
 name, 1 part. Pys. 2nd part Pys.
 Smith, Blimp / ~~Army~~, Army, Navy
 Health, Heron

Scene starts in the middle of ^{that you can} ^{make a change} ^{reaction} ^{what is}
 meeting ^{Chairman} so you think you cannot
 practice but matters in quotations
 of laws and it would be so cheap
 that every doctor could have a gram
 of the same + ~~How I do~~ and you want
 the Govt. to take charge of this development
 to what it? H. J. Os. Chair Is it this
 something that could be taken up by
 the Dept. of Health + Pub Health

I imagine gentle men have bored
 I am of hearing of new explosives
 It is my ~~unhappy~~ misfortune that
 I have to deal with innumbers I
 see hundreds of them every day and
 that means ^{that I have to maintain} some new explosives and
 3 ^{new} death rays per day believe me it
 is enough to upset the strongest
 chance. I am think perhaps ~~more~~ ^{more} I
 are ~~accustomed~~ ^{used} by killing the largest
 possible number of peoples with the
 most potent explosives. But I tell
 you that is no way of winning a
 war. Why in the last war it cost
 us 800,000 to kill one German. ^{I ask you} how
 many of ^{the} 800,000 our German ~~enemies~~
 could we kill before ~~even~~ at that rate
 before we went bankrupt? Believe
 me it is not the armament ~~the~~
 it is the moral of a nation that
 decides the outcome of wars.

Smith In that ^{it would} ~~case~~ perhaps the
~~present huge appropriation Army~~
~~appropriation~~ be possible to cut
~~down~~ ^{a little} the present huge ~~army~~ ^{army}
 speaking in my ~~approval~~ as a
 supporter (1) doing it's duty in
 moral. Army & as for as this
 chain reaction of kindness goes

I am not approved to the
being supported. If further
experiments are needed to
be willing to put up \$3000
if an exact amount is put
up by the Navy. -

Ch. I am sure your friend that
was with me much appreciated
But ~~the~~ perhaps me and to hear
Mr. Black ^(Belling) ~~that~~ at this juncture
when is our first one of ~~the~~ the
expert ~~at the~~ of my bapt.
Black rises to speak, Mr.
Chairman - Gentlemen...

Office - got at a desk by paddling
door to the left
A man ^{in a coat} with brief case enters
points to door. Man: Do Roosevelt
know, got should not take long
now White has been in for an hour
or so & door opens a man in
but no coat Briefcase comes and
says hello Nick goes to empty
desk picks up phone - Put me
through to the Secretary of War
this is ~~to the~~ White speaking,
the president read some article
this morning something by a
chap O'Neil in the N. M. J. Sunday

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~~Any of it seems then~~
~~that we are brooding~~

At this moment Canada

leaves room runs along
corridor but bumps at
corner into girl - secretary
mumbles an excuse and
runs down stairs. ~~He~~

In effect

Any. (It seems then we are
making our time) - Girl enters
hands him a slip of paper
Excuse-me gentleman, ~~There~~ same
important matter has come up
and I am wanted in the President's
office ~~I may be~~ There is not
much more I can do here
anyway it seems. Very glad
to have met you Mr. Clark, friend
of gentlemen. -

Chairman I am sorry Mr. Clark but
if there is not much we ~~can~~ can
do of our own experts do not
take a favorable view of your
project & this thing is too out of the
question to have an opinion of the our
own. Perhaps in some years or

You will find something
to prevent the atoms from
swallowing neutrons. We shall
be always glad to know to what
you have to say. I think I
am reproducing the views of ~~the~~
M. C. and Col. Marshall and
Commander Hull and the Dept of
Health if I say that this is a
matter for private and rather
than for the Govt. to take up &
What do you think Mr Smith
would private industry be interested
in it?

Smith: I ~~do not know~~. Mr. Noble
does not seem to imply that
~~there has no hope for tape records.~~
~~But Mr. Chairman there are~~
But Mr. Chairman before you
close this meeting I think it
is my duty to tell you certain
things. There are a few things which
you ought to know. When I received
your invitation ~~of~~ a week ago I ~~called~~ ^{called}
~~Mr. Tolant, over the telephone~~ ^{Mr. Tolant} ~~Blings~~
But Tolant is in Paris, Smith, I
~~there is a new use of~~
a new invention. It is called ^{the} ~~transmission~~
helixphone, in this problem long ^{they call} ~~transmission~~
transmission helixphone. Can't ask me

22

know it myself I would not
 know it but I have been talking
 to Ponds over it ^{on & off} ~~every~~ ^{every week} ~~since~~
 in the last ten years. Anyway
 I told him that he has ~~also~~
~~found~~ himself absorbed that neutrons
 are emitted from gold & U and
 that he can confirm Mr Plado's
 discovery and he thinks that it is
 possible may be possible to prevent
 the atoms from swelling there
 neutrons x ^{second physicist} ~~I have~~ ^{Dr. R. Dorn} ~~therefrom~~ asked
 Prof Landon Jun. to I am sure you
 all know of him to look after the
 matter and this is what he writes

"

Now what does he mean. ["] ~~Such~~
 laughs ~~that is~~ I asked him
 what he meant he says he means
 it is more likely than not that
 a ch. r. can be made
 than you would ~~wish~~
~~to think~~ that the Govt will take charge
 of this agree with Dorn that
 And this is the ^{I would wish} ~~very~~ last thing

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Now now that I have said that you
say you are sure that you can
make this ch. r. work? I think
I think I can make it work
but I am not sure there is no
such thing ^{in science} as certainty ~~in science~~
before the accomplished fact
beyond his patience, for the hell
with it coming to 300

I offer you a bet
10 to 1 and for all that I am
worth & I am not long but I will
~~say~~ would that he ^{play} that I have
made a hundred \$3 or 400 after
the first of the month *

Insert

30

Film

Scene

Discovery of neutron em.

Here in ~~that~~ ^{the} last standing
Best ^{is} ~~with~~ ^{holding} ~~shop~~ ^{shop} ~~modak~~ ^{modak} in hand
watching screen. Here: It is no
use, we have been watching it
now for a whole day. ~~Not a~~
~~single~~ ~~thing~~. ~~It~~ ~~even~~ if we
found a rock now and then
that would have no ~~significance~~
Rocks up his hat. ^{Because the} ~~But~~ ^{radio} ~~Harry~~ ^{is}
can have his radium back. ~~All~~ ~~be~~
~~off~~ ~~with~~ - Best not moving - Better
go and have some food ~~for~~ ^{we}
~~had~~ ~~no~~ ~~idea~~ ~~you~~ ~~know~~
Here walks ~~through~~ ^{know} floor towards
detector, when he is about to
enter appears Best looks
down Best ~~wants to show you something~~
~~they walk back~~ ^{that's a good one} ~~Best puts in racket~~
play hangs ~~Here~~ ^{good} ~~heavens~~
Best I'll put the radium back
Here puts in plugs. ~~kicks appear~~

close up

on screen Any God here they
are + Best joins him both ^{number}
watch in silence - Here picks up
hand number starts to ~~move~~ / Best

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~~starts to write letters notes~~

~~By~~ Some shifts to washing
good

Some shifts back