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The Radium Girls

INTRO...

Does the end always justify the means? Should profit, greed and capitalism always be paramount and take precedence over the suffering of human beings. In the book 'The Radium Girls', these questions are brought to the fore, being played out in the lives of young women in the prime of life, who had worked in the United States Radium Corporation [USCR] in New Jersey and the Radium Dial in Illinois. Prior to dying, these women suffered immensely from debilitating and painful necrotizing diseases that seems to eat away at your bones and flesh. Being young women, their beauty must have meant everything to them. One could only imagine the impact, the terror and horror, felt when to radium began eating away their faces and mouths beginning in the mandible, this was accompanied by festering and oozing ulcerating lesions, that smelt like decaying flesh.

It was in late December 1898 that the scientists Marie and Pierre Curie, discovered radium. This rare newly found element was considered a wonder drug a cure all for all that ails, it was aggressively marketed into every product conceivable, both commercially and medically. However by 1903 however, Mr Curie discovered personally, that radium has the potential to be lethal two human tissues externally. How much more so dangerous the element would be if ingested internally? Other scientist suspected and confirmed that radium was dangerous. As a result, some companies and laboratories enacted safety measures were incorporated in the handling the dangerous substance. Such as wearing lead apron and using ivory forceps. This is

dangerous downsides that were never made public All for the sake of profit as World War I was brewing...

Unfortunately for the dial painters, who played an integral part in the war effort, by painting luminous dials [that would go in the dark] on watch or clock faces for the soldiers. There were no precautionary measures were taken, nor were they informed about the dangers of radium. According to today's standards, their work station and environment would be considered toxic and bio-hazardous. The radium was everywhere and on everything and everyone. In the darkness the girls were luminous and seemed to glow eerily in the dark. When inspected by Katherine Drinker, the radium seem to be splashed all over their bodies and was embedded in their naked skin.

In the work studios being unproductive and/or wasteful of the precious commodity: the radium was a fireable offense. Not wanting to lose their jobs the girls were instructed to point the tip of the paintbrush with their mouth, in order to clean and also streamline the bristles, to paint the dial accurately, without smudges. This is practice was only done in America as other countries use different techniques for accuracy. This method was employed shortly after the studio was opened in 1916. Despite their apprehension about the method the girls were assured by Mr. Savoy, that the radium was a wonder drug and would do them more good than harm. Therefore they went along with it willingly without further question, despite the terrible taste and grittiness of the radium which they swallowed. Occasionally when the girls complained and/or when the company came under scrutiny, minor adjustments were made, water was added to clean the brush bristles. The found however, that water wasted the radium and by default they went back to lip-pointing.

Apart from occupational exposure and lip-dipping methods, being unaware of the hidden dangers the girls ate lunch at their desk. They even use the radium dust as part of the ensemble to enhance your beauty. They would paint their teeth, wore it as makeup on their faces in their hair, and on her clothes giving them that envied glow. Some even brought it home not only to work with, but to use on other family members.

Sabin von Sochocky are 34-year-old Austrian doctor founded the company. At one time he studied with the Curries, and was therefore painfully aware of the potential danger of radium's

hazards even though personally, he was careless in his handling of the material. This resulted in the loss of the tip off his left index finger. Only once, did he expressed concern, was when he saw one of the girls were lip-pointing with the brush with their mouth. As the owner he was negligent in his duties to protect his workers. Even Thomas Edison sounded the alarm about radium but no one took notice.

When irrefutable evidence was presented to USRC that radium was the culprit for the necrosis of the bone, the company denied culpability's because the test that were used was for the detection phosphorus; which came up negative in the woman's bloodwork. No indication of radium what's present as the test was not designed to detect Radium in the bone and or blood.

It wasn't until Doctor Harrison Martland, who conducted an autopsy on the first male employee Mr Lehman of the United States Radium Corporation, that had died from the radium poisoning on June 7, 1925, that serious attempts were undertaken to determine and measure the damage done to the human body from the radio active material. The device used was called the electrometer. They devised a two-pronged approached The gamma-ray test what is done using the electroscope to read and measure gamma radiation emanating from the human skeleton, and they also used the expired air method that measured the gas radon a toxic gas which was a byproduct of radium's natural decaying processes. It is worth mentioning that many girls have died prior to Mr Leman, never before had any thorough autopsy done on their remains. Cause of death we're usually attributed to a pathogens, and or anemia.

Hazel Vincent-Kuser

In 1917 as The Radium Luminous Materials Corporation expand expeditiously due to America's involvement now in the war. The number of girls tripled in order to keep up with high demand of luminous military equipment. One of the new recruitments was Hazel Vincent[married name Kuser]who came from Newark. Her plight and deterioration not only impacted her what also her immediate family members especially those that loved her the most, since childhood sweetheart, was her then to be, husband Theo Kuser.

During courtship Hazel became gravely ill, but was unwilling to accept Theo's financial help to get treatment. He decided to marry her so that she would accept his assistance. To get the

best help for Hazel they decided to visit an expensive oral surgeon named Dr. Theodore Blum who was the specialist in the field of dental radiology. After watching her daughter suffering for three years she threatened a legal action against the company in hopes that they would take responsibility for putting her daughter's life in danger and to help financially with her ever-increasing medical bills that run into the thousands. Dr. Blum Took it upon himself to appeal to the humanity of the company and requested that they help offset Hazel's medical expenses, but it was in vain. USRC did you not accept responsibility because on account of the Drinkers report they were not accountable. To help Hazel, the company would be admitting fault, and this would open up a pandora box for litigations Theo, after mortgaging heavily against everything he owned and essentially became bankrupt, in order to keep up with her medical expenses in hopes that she would become better. He even borrowed, and ended up depleting his father savings which was set aside to buy a house and for his retirement but in the end the love of his life, Hazel still died. She was only 25 years old. It was especially sad that when Hazel died it was a welcome relief to end her suffering. Her body was so ravaged by the disease that the family had a closed casket funeral.

It was my suspicion because the victims were women in a male dominated world in the early 20th-century. Their voices and cries for help fell on deaf ears, even though there were irrefutable evidence from unassailable sources that the radium was the cause of these women's plight. The conditions were diagnosis were confirmed by in number of doctors who saw a correlation between the manifestation of the disease and their employment at USRC. Even an independent panel of scientists the Drinkers' whom the company *themselves* had hired to investigate this phenomenon also seems to come to that conclusion as well. The Drinkers were hired only when productivity and profit seemed to be threatened when the woman started quitting the job. Even with the findings the company refuse to acknowledge the report, they became belligerent and try discredit their own scientists.

Help came in the form of a woman Katherine Wiley of the Consumers League who had stayed in touch with the Krus's family and found the continued indifference and lack of support to the dial painters cause deplorable and intolerable. In her frustration she set about a series of things in motion by contacting Dr. Alice Hamilton a brilliant scientist who is considered the

founder of industrial toxicology who fought the cause of victims off to occupational diseases. And she also reached out to dr. Frederick Hoffman, a statistician who specialized in industrial disease and had works for Prudential Insurance Company. This gave worker Marguerite Carlough, the impetus to eventually find a lawyer and to file suit against USCR to the tune of \$75,000 (\$1 million). Initially Arthur Roeder the owner of USRC was annoyed and was dismissive to the woman's claim. Little did he knew that the fight had only begun, the companies had already lost now that other players were taking to the field ...

The case against the radium company happened during the time when the woman suffrage movement was at its pinnacle between 1848 and 1920. They lobbied Congress to amend the Constitution giving women right to vote. Women now occupied jobs that previously held by men who were now being shipped off to war. This changes status quo, no longer were they simply dutiful home makers, but now they were proving that like men, they two are valued contributing members to society.

This could be liken to David versus Goliath scenario. There is a comparison that can be drawn, with the people against the tobacco industry. For decades they knew, and actively hid and denied the facts regarding the dangers of cigarette smoking. For years of aggressive advertisement such as Joel Campbell and the Mariboro Man brand, even on the big screens, each famous actor was smoking a cigarette. This make cigarettes very appealing to the public. According to the American Museum of Tort Law a precedents was set in the case of the tobacco industry versus the plaintiff Cipollone that was successfully won in 1966. This set the landmark for future decisions that finds the tobacco industry culpable and were subjective to compensate the surviving families who had lost love ones to cigarette smoking.

Margaret Loony affectionately known as Peg

Margaret Loony who everyone called Peg, is from Illinois. She was from very humble beginnings, being the first of 10 kids. The entire family lived right on the rail road tracks in a tiny one story wood-framed house with four rooms. She gave up her dream to become a schoolteacher by working for Radium Dial in order to support her family.

In Ottawa despite the litigation against the the New Jersey radium factory, for a while it was still business as usual in Illinois. The company had been tested by the workers, but never revealed the results to them. Therefore no suspicions or alarms were going off. In secret however, the company try to eliminate the lip-pointing methods that had been banded by coming out with various methods of cleaning and streamlining the bristles of the brush used to paint the dials, but whatever they concocted was abandoned when it was realized that too much radium was being wasted.

In June 1928, information about the New Jersey settlement became international headlines. Ottawa newspaper reported on the death toll form radium poisoning was now 17 and was climbing. The news came as an utter shock to the girls from the radium Dial studio; they were in a state of fear, panic and disbelief. It would seem for the first time they came face-to-face with the reality of their own mortality and the radium poisoning.

Symptoms it would seemed to start with toothache and pain in the jaw. Peg Loony was still suffering at the site where previously one year ago she had an extraction. Swen Kjaer was the one who wrote the report that was never seen by the Radiant Dial girls. In this report he found it that one dial painter initials ML, ie Peg Loony had been found to be a radioactive by the electroscopic test in 1925 and in 1928 consecutively. Unfortunately for Peg she was never informed of the findings but by the firm that she was in optimal health, and that there was nothing for her to be concerned with or to worry about. The opposite was the right reality and Pegs, health started to deteriorate a rapid clip.

As Peg's health declined, her feyonce Chuck Hackensmith, put on a brave face and remain steadfast at her side assisting her especially with transportation in a little red wagon as she was too sick to walk. They were going to get married next June. By the summer of 1929 read here pay hot mold tooth extractions then never healed she developed an anemia I'm paying that sounds in her hips so that she could barely walk. Her family what's painfully aware of her suffering but there was nothing they could do all of her mother could do was watch her daughter decline, as she was wasted away writing front of her eyes. The doctors were baffled at Peg's condition. However Peg knew that she was dying, she was realistic about her condition, and try

consoling her mother. Being a dutiful daughter, who worked right up to the end to help provide for her siblings. She was a selfless person who did not deserve this...

Radium dial had been warned by Kjaer that Peg was a special case that's a government was interested in. Being under this type of intense scrutiny forced the company to keep a tight seal and try to cover-up Peg's condition even hindering her own family members from visiting her in the hospital which they had selected and we're paying the bills for. Leaving Peg isolated from her dear loved ones. At her death they even tried to confiscate her body and back to bury secretly. They would've gotten away with it if her brother-in-law had not intervene.

THE TRIANGLE SHIRTTWAIST FACTORY FIRE

This is dangerous working conditions reminded me of the 146 garment workers, seamstresses *all women* mainly girls and immigrants who had recently arrived from Europe, that were killed in a fire in the New York City garment factory in March 25, 1911. There were no fire safety measures implemented. Bales of flammable material were strewn everywhere, and smoking was not prohibited. To maximize productivity the one fire escape was purposely sealed off by the bosses to prevent theft and to discourage the girls from taking too many unnecessary breaks. When the fire broke out the factory became a death trap. The building was not designed for emergency evacuation. The bulky equipment the tables and sewing machines became a weapon that blocked many them from escaping, sealing many of the victims inside. To escape burning to death many of them plunged out through the windows from the eighth, ninth and tenth from the Ash Building in lower Manhattan, onto the sidewalk.

Despite attempts from the firefighters, the ladders were too short and they were unable to reach the desperate girls. The only thing that they were able to do was to use a few bucket of water to douse the flames on the floors beneath. The only fires escape collapsed during rescue attempts adding further to the death toll. As a result, to escape burning alive many of them plunged out through the windows to their death, from the eighth, ninth and tenth from the Ash

Building in lower Manhattan, onto the sidewalk, as a safety net used by the firefighters simply ripped like shreds of paper.

This tragedy and others have helped implemented in workplace standards that protected its workers, that we are all benefiting from today for example Occupational Safety and Health Administration [OSHA], fire drills, sprinkler system and fire extinguishers, employee rights and protection, also unions and human resources, and workers compensation etc.

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The Radium Girls

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