

have been serious. A very conservative estimate of the number of exposures producing these injuries has been made. The minimum number is placed at 1,000,000. This gives on an average less than one in 5,700, and covers the time from the discovery in 1895 to the present, nearly seven years. If we omit the past years and consider the current one only, the ratio does not exceed one burn in 75,000 exposures. So much for records. It seems to me, therefore, that we would be within the limits of safety if we tell our patients that there is not one chance in 20,000 of their getting a severe burn from an ordinary exposure, and not one in 10,000 of any injury resulting.

You will pardon me if I here relate an early experience that I had; there is a curious point of interest connected with it. About three and a half years ago a young man of about thirty years called at the office to make arrangements to have a skiagraph of his head made. He stated that he was the subject of epileptic fits, taking from three to five weekly. I made the appointment, warning him that there was some danger of a burn on account of the time required for the exposure. He was willing to take the risk because he was getting worse and he was tired of taking "dope," as he called it, which had completely derided him of the virility of manhood. Besides, he hoped that the skiagraph would reveal the cause of his disability. I made two skiagraphs on different days of the same side of the head, the first with twenty minutes' and the second with thirty minutes' exposure, at a short distance. About three weeks after he called at the office and showed me his head. To my astonishment there was not a hair left on that side. It was as white and smooth as an ivory billiard ball. He wanted to know if it would grow in again. This was a difficult question for me to answer then, and I had to hedge a good deal. But what was more astonishing, he said that he had not had a fit since the exposure. I did not see him again for over two months, when he had as nice a crop of hair on the affected side as anyone could desire. In the meantime he had had only one fit. I might say that when I saw him, after the hair came off, there were no signs of inflammation, but he stated that the head was hot some time earlier and it had been a little red. How did this treatment act in suspending the fits? Was it due to the sedative action of the rays, or was it the counter irritant effect produced and which took a long time to subside, or what?

But, coming back to the subject of X-ray burns. These injuries, however produced, may, with a fair degree of accuracy, be grouped into four classes. (1) The dermatitis of X-ray workers. This class is by far the most numerous. The operator who does three or four hours' work daily for years, without pro-