out and planted in rows in turn as they came from the box. Some of the same seeds that had not been influenced by radium at all were planted beside those that had been so influenced. This experiment showed that the longer the seeds were exposed to radium the weaker was their growth. Those that were left long enough under its influence were killed, and did not grow at all. The action is the same on animal and vegetable cells. It is supposed that the gamma rays are the efficient ones that act The dynamic force of radium we have not upon the cells. yet measured very well. In regard to its use, however, the subject of cancer has become a prevailing one for serious popular This is unfortunate, because this will hide contemplation. the real use of radium. Cancer will not be settled for a generation. If we get to the fringe of it we will do a great deal. The very beginning of cancer has hardly been touched upon as yet.

In the experiment with the seeds he showed different rows stunted by different exposures. All the plants were there, but stunted in growth in direct relation to the time of their seed exposure to radium influence. Bulbs also were shown retarded in growth in a similar way. These bulbs went through life each the same as the other, only stunted and delayed in growth. The action on the cells of tumors is the same. The cells of these are arrested in development, and if the exposure to radium is long enough they necrose.

A very remarkable case was shown, one of sarcoma of the After using a large amount of radium in treatment for scalp. two days the tumor was half gone and in twenty days had entirely disappeared. This patient remained in Johns Hopkins Hospital for two months and then went home cured. Speaking of the physics of radium, Dr. Abbe alluded to the experiment already mentioned, and said that the alpha rays have a short excursion, the beta rays an excursion of about five inches, An whereas the gamma rays go straight into infinite space. experiment was made to prove that there are these different rays. A radium plaque was used with lead screens in front of it to prevent the rays getting beyond a certain distance; beyond was a barium platinocyanide screen. The rays from the plaque were seen going to the upper part of the screen, but below all was in darkness by reason of the piece of lead interposed. An electric magnet was put in front and all the alpha rays were changed in direction and the beta rays were changed in course so completely that they illuminated behind the point from which they started. They were so deflected they came