U. S. Forest plot (Roberts) at Urania has been burned twenty times, usually in the month of January, and the trees still survive—a perfect stand but not near so vigorous as the unburned plot adjacent. These plots were established after the seed fall of 1913 and the trees are now nearing twenty-two years old. Had these burns been timed every five years instead of annually, I am sure the plot would have outdistanced the unburned in volume ere this. It may yet catch up with the unburned companion plot handicapped as it has been.

I know we face the danger of the public not understanding our methods or plans, but if we could convince them that fires had to be prevented before we could grow trees, surely we can explain why we now resort to "controlled burnings" at stated intervals. The people who live in the forest and many who do not are forest minded and are actually acquainted with the very problems that I am now discussing. I feel confident that when I acquaint our people with these plans that we will have greater and more complete coöperation than ever before. In bringing this matter before the council for discussion and action, I feel as if I have done my full duty and sounded a note of warning.

Chairman Butler: The meeting is now open for discussion.

President Chapman: I just want to say a word to you gentlemen; that is annual fires in the longleaf pine type have proved to be bad, but total exclusion of fire has proved to be worse.

In 1926 I published in a bulletin my conclusions that both were wrong.

Annual fires in our experience had fatal effects and were disastrous. We finally tried the plan of burning at intervals of two or three years and in sharp contrast to the previous plans, the seedlings developed normally starting their

height growth in the fifth year. By the proper use of fire we are now raising at Urania, La., crops of the most beautiful seedlings that you ever saw.

I want to emphasize that after twenty years of observation of permanent plots, trying all of these experiments, I was forced to the conclusion that longleaf pine was dependent solely upon fire not only for regeneration and establishment but for the survival and health of the seedlings and later in the sapling stage, for the prevention of complete destruction by crown fires in the last summer months.

Chairman Butler: Is there any discussion?

Mr. Austin Cary (U. S. Forest Service): Most of you probably know that for more than 15 years I have worked in the country under review. Associations of all kinds are called up by what has been said and the previous speakers I have met many times in the territory.

Mr. Eldredge, for instance, I have several times heard speak in the South on fire in that region and can confirm his own statement that, to the best of my recollection, this is the first time he ever spoke in favor of fire and as a means of protection. This other fact I will also note-that his successor in management of the Superior Pine Products Co. property is following the same policy that he did and in a more intensive way, plowing a very large mileage of fire breaks, inaugurating radio service in addition to lookouts and telephones in the effort to exclude fire entirely.

Mr. Hardtner too I have heard speak on both sides of this question as he himself, I am sure, will freely admit. I could also, if I saw fit, remind the Southern Experiment Station of views diametrically opposed to those presented here that they long held, being very straight laced about it, as it seemed to me.

For my part, in the years during which