Court based on the evidence relating to the age of the valley and the methods of building the valley land is indicated in the following extracts from the decision rendered.

EXTRACTS FROM THE DECISION OF THE SUPREME COURT OF THE UNITED STATES IN THE CASE OF OKLAHOMA VS. TEXAS, UNITED STATES INTERVENER. PP. 12-14.

Common experience suggests that there probably have been changes in this stretch of the Red River since 1821, but they cannot be merely conjectured. The party asserting material changes should carry the burden of proving them, whether they be recent or old. Some changes are shown here and conceded. Others are asserted on one side and denied on the other. A controverted one is ascribed to the so-called Big Bend Area, which is within the oil field. That area is now on the south side of the river and connected with the bluffs on that side. Oklahoma and the United States assert that in 1821 a channel of the river ran between it and the bluffs and that the river has since abandoned that channel. Texas denies this and insists that the situation in 1821 was practically as now. . . . It (the testimony of the experts) is so voluminous that it does not admit of extended statement or discussion here. We can only refer to important features and give our conclusions.

It (the Big Bend) is larger now than sixty years ago, but how much is uncertain. The enlargement is the result of intervening accretions. The habit of the river is to erode the outer bank of a bend and to accrete to the opposite bank. . . . On the outer part are physical evidences of the formation being comparatively recent. On the inner part are like evidences of the formation being old, among them being the presence of living trees more than a century old. One of the trees, a pecan, attained an age of 170 years. . . . To overcome the inference arising from the presence of the old trees, which were well scattered, testimony was presented to show that in 1821 these trees were all on islands, which afterwards were consolidated amongst themselves and with the land on the south side. We think this testimony is essentially speculative and not a proper basis for judgment. In this area, as elsewhere in the valley, a succession of depressions is found at the foot of the bluffs, and some testimony was produced to show that in 1821 the river, or a part of it, flowed there. It may be that the river was there long ago, but the testimony that it was there in 1821 is far from convincing. . . . Our conclusion is that the claim that the river, or any part of it, ran south of this area in 1821 is not sustained. So the boundary follows the cut bank around the northerly limit of the area.

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## CHAUNCEY WILLIAM WAGGONER[1]

IT is fitting that the faculty of West Virginia University in general session assembled should pay appropriate tribute to the memory of Chauncey William Waggoner, head of the department of physics in the university, whose life and work have been so abruptly and tragically ended.

Professor Waggoner had leave of absence from the university for a year and was engaged in following up certain scientific investigations in the interest of a large industrial corporation. In pursuit of this work he was visiting Shreveport, Louisiana, where he met with the unfortunate accident that caused his death. He was thrown from a horse on October 24 and died on October 26.

Chauncey William Waggoner was born at Rock Bridge, Ohio, February 23, 1881. He was graduated from Ohio University at Athens, Ohio, with the degree of B. S., in 1904, and from Cornell University with the degree of A. M. in 1905. For five years he was student and instructor in Cornell University. He specialized in physics and won his doctorate in 1909. In the same year he was chosen professor of physics and head of the department of physics in West Virginia University and took up his work at once.

The thirteen years that followed were years of unusual growth and expansion in the university, especially in the departments of science, and Professor Waggoner, in sympathy with this development, reorganized the department of physics adequately to meet the growing demands upon it. He was always anxious that his department should be well equipped and able to do efficient work, and that the standards of science teaching and scientific research in the university should be uniformly high. Toward these ideals he worked with splendid enthusiasm.

[1] Resolutions adopted by the Faculty of West Virginia University.

As a member in active attendance on the meetings of numerous national scientific bodies, he kept himself in close touch with the advances made in physics and engineering. He brought to this university and to his state valuable information gleaned from such associations, and shared it with others. He was himself active in research. As a result of his activities he was personally known to many of the leading physicists and engineers of the entire country, a number of whom have written letters of regret upon his untimely death and of highest appreciation for his personal friendship and for his contributions to science. The high estimate of his practical knowledge is attested by the fact that he served as consulting engineer to several large industrial corporations.

Before the establishment of a department of weights and measures in his state he labored gratuitously and tirelessly to secure the enactment of adequate and just legislation to regulate the use of weights and measures in the state, and after the establishment of a department of weights and measures in 1915, he worked zealously, as assistant commissioner of weights and measures, to help make this department useful and effective. His compensation for this was the satisfaction of knowing that he was helping to increase the sum total of honesty and square dealing among his fellowmen.

During the participation of the United States in the great war, Dr. Waggoner was chairman of the research committee of the state council of defense. He was also active in researches with industrial corporations engaged in the manufacture of munitions. In the early months of the participation of the United States in the war, he supervised the work of a class of young men taking training in radio signaling, and later had charge of a large signal corps training unit at the university.

Dr. Waggoner was broad in his views and many-sided in his interests. Native ability and scientific training guided him to well-based judgments. While tolerant of others' views, he was constructive and convincing in the presentation of his own views. Alert to every phase of civic and spiritual betterment, he showed himself in daily practice a sympathetic colleague, a kindly neighbor and a dutiful citizen. For young people he had especial sympathy, and he was active in encouraging their interest in religious and community life as in the pursuit of scientific knowledge. He had unusual zeal and energy. Hence, he labored without stint to advance the interests of youth, church, community and state. He had a strong moral courage. He therefore supported frankly and firmly, though with becoming courtesy toward adversaries, every cause which he deemed worthy of his espousal. His power of initiative and analysis made him a weighty advocate or a strong opponent. In him we find exemplified the finer qualities of scholar, teacher, colleague, neighbor and citizen.

ROBERT A. ARMSTRONG,
E. H. VICKERS,
F. A. MOLBY

JANUARY 10, 1923

## SCIENTIFIC EVENTS

### ANIMAL PATHOLOGY AT THE UNIVERSITY OF CAMBRIDGE

AS has been noted in SCIENCE the senate of the University of Cambridge has accepted the offer of the ministry of agriculture of a sum of £30,000 to found a professorship of animal pathology. The London *Times* states that the foundation of the professorship is the first step towards the creation of an institute for research on animal diseases. It has long been felt with increasing keenness that the losses from disease among live stock have been unnecessarily large; that, in fact, a considerable proportion of these losses might be prevented by an extension of scientific research. This applies not only to those scourges which are widely advertised by the government measures adopted for their suppression, but to other more or less obscure diseases of which the farmer is aware, but about which the general public is ignorant. The aggregate losses from animal diseases amount to millions of pounds every year.

The expressed opinions of the farming community are said to have played a considerable part in inducing the ministry to make the present offer to Cambridge. Farmers have felt for some time that they could not go on bearing silently the losses caused by disease without making a determined effort to call in the aid of scientific research. Losses by disease may or may not be preventable, but whatever