

IN SAME SPOT TWICE

Forest Rangers Say Lightning Does Repeat Stroke.

A Tree Once Struck is Thereby Rendered More Liable to a Second Bolt—Person is Safer Standing Under a Tree.

Washington—Lightning does strike twice in the same place, despite the old saying. Rangers in the national forests report that single trees are often struck many times. Indeed, they say that a tree that has been deadened by a former stroke is more liable to a second attack; the dry, dead branches appear to be better conductors.

In a report Fred G. Plummer, geographer in the forest service, explains also the theory that in a thunderstorm a person is safer in the open than under a tree.

"It has often been stated," he says, "that the majority of persons killed by lightning sought refuge under trees, but this is not a fact. More than one-half of such deaths occur in the open and less than one-quarter under trees."

The tree under which the person stands catches and absorbs the force of the stroke. The greatest danger is from secondary shocks or from flying splinters from the shattered tree. A person standing out in the open, being the most prominent object, attracts and receives the direct stroke of any electric current that may come near him.

Mr. Plummer says that lightning strikes more frequently in New Mexico and Arizona than in any other section of the country, though there are more thunderstorms in Florida and Illinois.

He reviews some of the curious early and present beliefs and theories about the immunity of some trees from lightning strokes. Late experiments and observations seem to bear out such a theory. While it has not been practically established, it is considered certain that some trees are more liable to stroke than others. Fiber, structure, shape and degree of moisture probably account for the immunity or liability. On this subject he says:

"From early times there has been a belief that certain trees more than others are likely to be struck by lightning. The elder Pliny said: 'Lightning never strikes the laurel.' This tree was also called bay, and wreaths of its leaves were worn by ancient rulers, both as a symbol of victory and as a protection from the lightning of the gods. Seneca and Plutarch held similar beliefs, which may be traced down even to modern times; but the theory as now held includes a number of trees, differing in various countries. This belief was so firmly established that such trees as the beech and locust, supposed to be effective in warding off lightning, were planted near dwellings.

"To this day there are many who still insist that the beech is never struck, while in parts of the United States the aspen is considered immune from lightning. On the other hand, it was believed that such trees as the oak, particularly cork oak, had a very bad reputation for attracting lightning, and this belief prevails even now. There is a proverb: 'Avoid the oak, flee from the aspen, but seek the beech.' And also:

"Beware the oak, it draws the stroke; Avoid the ash, it gives the flash; Creep under the elm, 'twill save from harm."

Mr. Plummer reports that incomplete forest records show that 76,801 trees have been struck in the national forests of the west during the past four years. The records have not been kept for the whole of that period in all the territory affected and under the supervision of the bureau. Lightning causes many of the destructive forest fires.

GUARDS FOR McLEAN TOMBS.

On duty in Rock Creek cemetery at the tomb of Mrs. John R. McLean, who died at Bar Harbor September 9, is an armed guard to insure protection against marauders.

A rumor that Mr. McLean insisted on having the night guard stationed and locked inside the tomb is denied, however. He is simply hired to keep guard at the tomb entrance.

Employees at Rock Creek cemetery recount the fact that Mr. McLean kept guards at the tomb of his father and mother for several years after their death, although there has never been any attempt to despoil or rob any of the tombs in the cemetery for many years.

One Possible Explanation.

An Australian correspondent sends "Electrical Engineering" the following: "Not long ago, somewhere in New Zealand, a firm ordered a number of house service alternating-current meters. It happened that the inside of one of these contained a loose piece of cast iron, which caused a fairly loud humming noise when the current was passed through the meter. The firm who had received it returned it to the wholesale house from whence it came, accompanied by a letter, which was dictated and evidently signed in a hurry, as it read thus: 'We return you herewith one of the six meters recently supplied, as this meter makes a dreadful noise and hums considerably. We think this must be due to the laminations of the iron core.'"

ARTIFICIAL HAY DRYING.

That it is commercially profitable to dry hay by artificial means, thus eliminating the large waste due to damage by rain in the fields after cutting, is the belief of officials of the department of agriculture.

For two or three years past experts of the office of farm management have been conducting experiments in southeastern Missouri with alfalfa hay, putting it through a kiln-drying process. For a time doubt existed as to whether hay could be dried in this manner on a commercially profitable basis. While the work of experimentation has not been concluded, officials are satisfied that kiln-dried hay would save the farmers of the country an enormous amount of money annually.

The department has not formally announced the exact location of the government's plant. It is in the alfalfa belt of southeast Missouri and was under water for a considerable period of time during the recent flood. Since that time, however, it has been put into commission once more. It is expected that a formal bulletin dealing with the experiments will be published by the department in the near future.

Hay artificially dried is subjected to great heat for a short time and comes through the process retaining a rich green color. The juice is forced out and the larger part of it preserved.

ORDNANCE FOR PANAMA.

The ordinance department of the army is busily at work in the manufacture of ordnance for the Panama Canal fortifications. This ordinance includes a number of 14-inch guns and guns of smaller calibers, mortars and their carriages. There also is under way a disappearing carriage for the 16-inch gun built by the ordinance department some years ago, which has never been used, it having been kept at the Sandy Hook proving ground since its successful test. The law under which this gun was built specifies that it shall be mounted in the United States. However, a carriage is being built for it, with the expectation that congress will authorize it to be mounted in the Canal Zone.

Owing to the delay of congress in providing funds for the canal fortifications, these works will not be ready by the time the canal is opened. It is expected that some of the guns and their carriages will be sent to the Canal Zone and mounted in about six months, but it will be impossible to have all the ordnance ready by the time the canal is ready for traffic. The 16-inch gun carriage will not be finished for about two years.

PROFIT IN PAPER MONEY.

There are millions of dollars of currency outstanding, lost, destroyed or being preserved as souvenirs which the federal government never will be called upon to redeem, according to a compilation of figures by the register of the treasury. This indicates that the government makes a big profit on its issue of paper money. At the present time \$15,233,093 of outstanding of the issue of fractional currency notes during the Civil war, familiarly known as "shinplasters," the total issue of these notes was nearly \$39,000,000. It is known that many people are saving samples of them as relics, and it is probable that very few of the outstanding \$15,000,000 ever will be presented for redemption.

Of the nearly \$1,000,000,000 worth of gold certificates issued during the Civil war about \$60,000 is still outstanding. There is also outstanding \$1,095,000 of the \$100,000 issue of gold certificates of the series of 1888.

EXPENSE ACCOUNT TRIMMED.

Uncle Sam announced the other day that he would not reimburse government employes for mosquito nets, whisky, shoes, clothing and medicines incident to traveling. Controller of the Treasury Tracewell rendered a decision to that effect in passing upon the expense account of Claude A. Thompson, special assistant attorney general, who made a trip into Canada for the department of justice last summer. Tobacco is allowed. Mr. Thompson's expense account carried the following items:

One pair shoes, \$9; field glasses and fly net, \$5; whisky for use on trip \$3; tobacco for men, \$1.

Darwin as Girls Read Him.

Miss Elizabeth Marbury, the dramatic agent of New York, said at the Colony club the other day:

"It is an error to think that the intellectual girl is dowdy. Look at the girl graduates about you. Those with the highest marks wear usually the nicest frocks."

"I said one day to a Bryn Mawr girl: 'How beautifully your pannier gown fits, dear. I thought you gave and reversed buttons were above such trifles.'"

"Oh, no," said she. "We all believe here in the survival of the best fitted."—New York Tribune.

Chance to Show His Skill.

Bad-Looking Man—I see you have a sign out, "Masters of Women's Habits." Do you mean it?

Ladies' Tailor—Certainly I do. Bad-Looking Man—Well, since my wife's been going to the club she's lost all the good ones she had, and I wish you'd make her a complete new set regardless of expense. And please include the habit of staying at home once in a while and mending my clothes.

TRAGED TO ACCIDENT

Valuable Discoveries Not Always Result of Thought.

History Records Many Cases Where Mere Chance Has Directed Groper After Improvements to Pursue the Proper Course.

It is repetitive history that many a person who has spent hours upon hours upon combining and recombining the factors of his problem, has had the solution thrust upon his attention by some casualty of daily life. Such occurrences are the spice of research and lead on many a weary investigator in hard and exacting labor. Here is the field where the trained observer has all the advantage. For how many fortunes may never have been realized only because no one had eyes to behold the revelation.

In our own time every beet-sugar factory was confronted with these two problems: How most cheaply to move the beets from the storage sheds to the slicers; and how to cleanse the beets from the dirt, small stones, and rubbish carried from the earth silt. A German factory happened to have a considerable quantity of beets piled alongside an open drain. A very heavy rainstorm came on, and when it was over it was found that the beets had not only been carried to the very door of the factory, but were cleaned as well. From that time on every factory has flushed its beets along a pipe from storage to plant and saved money by combining the two operations of transportation and washing.

Thomas Kingsford discovered the process of making starch from Indian corn by chance. Starch could be made from potatoes and from wheat, but it had always been found impossible to separate cornstarch from the accompanying gluten. The wheat starch methods did not answer. Kingsford was a mechanic working long hours, and all his experiments were made in his own kitchen with his wife's pans, tubs, and buckets as his laboratory utensils.

The unsatisfactory result of one of his experiments—a mush of cornmeal and water—he disgustedly threw into a garbage tub. A little later his wife threw into the same tub some lye wastes (potash solutions). Upon emptying the tub the next day, Kingsford was surprised to find a small amount of fairly pure starch at the bottom. His wife fortunately remembered throwing in the lye, and thus the basic principle was discovered. Kingsford soon worked out a practical process for making cornstarch commercially, and made a great fortune.

In 1742, Thomas Boscover, a mechanic, of Sheffield, discovered the art of silver-plating. He was repairing the handle of a knife in which both copper and silver were used. Accidentally the two metals were fused together. Based upon this observation he developed the new process. Upon a thick ingot of copper he bound by iron wire a thinner ingot of silver. The whole was then heated in a reverberatory furnace until the edges of the silver ingot were observed to begin to melt. The two ingots were then removed from the furnace, slowly cooled and pickled, cleaned and rolled to the desired thickness. The result was a plate of copper more or less thinly covered with silver on one side. This was the first Sheffield plate. For fifty years following, the copper was plated on one side only, and the cut edges showed the copper. Later, the process was so perfected that no copper was left exposed. All the silver-plate of the world was made by this process, until electroplating was discovered and made commercial.

Words Multiply Fast.

Figures have just been made public by Prof. A. S. Cook of Yale university as to the number of different words in the authorized or King James version of the Bible. Excluding inflected forms of nouns, pronouns and verbs, Professor Cook makes the total 6,568. Including these the total is 9,884. The working vocabulary of the average man falls far short of this number of words. On the other hand, not a few contemporary authors must far exceed it, considering their realms of colloquial speech and technical terminology that the biblical narrative does not touch. Besides, there is the immense extension of both knowledge and of words in the physical sciences, about which the educated man of today must know something. Hence, as a matter of fact, during the past century dictionaries have waxed bulky, and words have multiplied at an astounding rate. Thus between the first and latest editions of Webster's dictionary the word total mounted from 70,000 to 400,000.

More Shakespeareanism.

A correspondent of the New York Evening Post has discovered that Shakespeare wrote the Psalms. We have long been of that opinion, but we lacked the proofs that are now forthcoming. Shakespeare's name appears in many spellings, either three, four, or five vowels being admissible. Every one knows that in such cases the golden mean should be taken. In this case it is obviously four. Moreover, the number of consonants is six. The graphic number, then, is forty-six. Turn now to the King James Bible, and to the Forty-Sixth Psalm. Count from the beginning and you will find the forty-sixth word to be shake; count from the end and you will find the forty-sixth word to be spear.—Q. E. D.

DUCHESS OF MANCHESTER HAS PRICELESS JEWELS

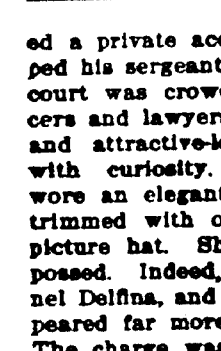
The beautiful Duchess of Manchester, a daughter of Eugene Zimmerman, the Cincinnati millionaire, does not lack for jewels to adorn her personal charms.



Besides the famous heirlooms of the noble house of Montagu, which are the appanage of the reigning duchess, and her own private collection of gems, she has the privilege of decorating herself with the priceless necklaces, bracelets, tiaras and rings of her predecessor, on the strict condition that at all times she must insure them against fire and burglary. These jewels are held in trust in accordance with the will of the late duchess who died in November, 1909. She also bequeathed to the duke a life interest in \$84,240 of her estate. Like the present duchess, who was married in 1900, she was an American, Miss Consuelo Yznaga of Ravenswood, La. The Manchester titles were granted by the first of the Stuarts and by the first of the Hanoverians for services rendered in connection with the establishment of these alien monarchies in England—viscount and baron in 1620, duke in 1719. The noble turncoats evidently believed in judicious trimming and doubtless feathered their nest well in the process.

SIGNORINA LABRIOLA'S SUCCESS AS LAWYER

The new feminists have another victory to record. After a determined fight Signorina Teresa Labriola, professor of philosophy, and a leader of the feminist movement in Italy, has succeeded in asserting the right of women to plead before the courts. Her debut has just taken place before the military tribunal, where she defended a private accused of having slapped the sergeant in the face. The court was crowded chiefly with officers and lawyers, who eyed the slim and attractive-looking young Portia with curiosity. Signorina Labriola wore an elegant black silk costume, trimmed with old lace, and a large picture hat. She was entirely self-possessed. Indeed, the president Colonel Delfino, and his fellow judges, appeared far more perturbed than she. The charge was a very serious one, and the procurator-general asked for an exemplary sentence—four years' imprisonment—but after an impassioned address by Signorina Labriola, who was often interrupted by applause, the accused got off with only four months.



William Penn a Socialist. The ideas of William Penn are not often accounted heretical, and yet part of his political creed as announced in the following citation must appear iconoclastic indeed to many persons today, while others are surprised to find him so well abreast of the times. He said:

"Every government should provide for every subject the means of living both honestly and at ease. We should bring out of every man and every creature as much utility as we may. Now utility will never be produced, unless we render life easy and comfortable. If all men and women would labor six hours in the twenty-four, some mentally, some corporeally, setting apart one day in the seven, all work would be completed that is requisite for our innocent and rational desires. . . . I tell thee the thing is possible, and is done."—Christian Science Monitor.

His Profession. "You have been walking about this great city for six weeks, and haven't found work?" said the kind woman, feelingly.

"Yes," replied the seedy man at the kitchen door.

"You are willing to work, I dare say?"

"Willin', mum? I'd work my lungs off if I could get a chance."

"And you would do any kind of honorable work, I presume?"

"Yes'm, anything that's in my line. I believe in every man stickin' to his profession."

"May I ask what your profession is?"

"I'm in the domino line, mum."

"Domino line?"

"Yes'm; I put the spots on the double blanks."

He Knew "Rottenluck."

During the cotton picking season in Texas a colored brother who had gone into the country to work returned very much disgusted.

"Didn't yo' git no cotton ter pick no cotton?" asked a friend.

"Sech es de was. White man done offered me one-third o' wat Ah could pick. Ah done talk a look at de field an' saw dat w'en it waz all picked it wouldn't amount ter one-third. So Ah done lit out fer home!"

"To-all was in look not ter git foolod none."

"Yassuh. Ah done went ter school an' studied ritentluck when Ah was young."

STATESMAN IN YOUTH

Brilliant Boys Who Made Mark in English Parliament.

Youngsters Who Had Not Attained Majority Made Laws for Britain—Fox's Comment on Speech of William Pitt.

It is contended that the British house of commons is the most widely representative legislative body in the world, since it includes not only all social grades, from the miner and the artisan to the actions of ducal houses, but numbers among its members men of all ages, from the youth in his twenties to the veteran of 80 years.

So long ago as the year 1613 there were forty legislators in the commons who had not attained their twentieth year, and, incredible as it may seem, certain of them were only 16 years of age.

Edmund Waller, the poet and courtier of Stuart days, was a schoolboy of 16 when he qualified as a member of parliament. He was, as Clarendon says, "nursed in parliament," and probably was the only man that ever lived who could look back two-thirds of a century to his debut as a legislator.

Charles James Fox was only 19, and still had a vivid and painful memory of his foggings at Eton, when he was "returned" to parliament for the "pocket borough" of Midhurst. He was not many weeks older when he made one of the finest "maiden speeches" ever heard at Westminster. "I hear it spoken of by everybody as a most extraordinary thing," his delighted father wrote to a friend, "and I am not a little pleased with it."

Chesterfield was a legislator at 20, at which age he entered commons as a member for St. Germans. His first speech is said to have electrified the house. His triumph was vitiated, however, by the fact that, inasmuch as he was not of age, he was liable to a heavy fine for speaking in the house.

Still more precocious was William Pitt. Although he had passed his twenty-first birthday when Appleby sent him to parliament, he, within a few weeks after taking his seat, established himself as the keenest debater and finest speaker in the commons. After his maiden speech a member of the opposition is reported to have said to Fox: "Pitt will be one of the first men in parliament." "He is so already," replied Fox.

Pitt, as everybody knows, scarcely had completed his twenty-third year when he was made chancellor of the exchequer. At 34 he was prime minister.

State Medical Aid.

A writer in the Long Island Medical Journal makes a plea for the nationalization of medical practice on a socialistic basis. Just as the schools and the mail service have been taken from the hands of competitive business, he holds that the public health should be organized as a public service; that now the criminal, the insane, etc., receive the attention of the state so why should not the sick man be likewise cared for at the expense of the state and not left to the mercy of the business methods that prevail in medical practice? "Human life and happiness," says this thinker, "should be the objects of solicitude on the part of the state in whose employ the medical profession should be enlisted as the great conservers of the most precious of the nation's natural resources."

Fortune Still Unattained.

Lowell once met an acquaintance (of dubious standing), whose cheerful face and happy demeanor led him to ask the cause of such exuberant felicity. "Why," said the genial smile, "I've discovered a way to make my fortune. We all know that the reason for the fine favor of the wild duck is the wild celery on which it feeds. Now I propose to feed it to the domestic duck, and supply the market." Some weeks later, on meeting his acquaintance again, Lowell found him quite depressed, and inconceivable. "Why are you looking so unhappy? I thought, the last time I saw you, that you were on the point of making your fortune with ducks. Wouldn't it work?" "No," was the reply, "the d—n thing won't eat it!"

Chair for the Editor.

Although the source of this little anecdote about Mark Twain is not definitely known, there is no good reason, according to Harper's Magazine, to doubt its genuineness:

One morning soon after Mr. Clemens had purchased an interest in the Buffalo Express, he arrived at the office to begin his duties as editor. There happened to be no one present who knew him. A young man rose very brusquely, and asked if there was any one he would like to see. It is reported that Mark Twain replied, with gentle deliberation: "Well, yes. I should like to see some young man offer the editor a chair."

Killing Off California Lions.

Seventeen mountain lions were killed in eleven counties of the state in August, according to claims presented to the state comptroller by the state board of fish and game commissioners. San Benito and Sierra counties lead the list, with four scalps each. For each scalp the fish and game commission gives a \$20 bounty. —Sacramento correspondence. Los Angeles Times.

TSAI YUAN-BEN'S TREMENDOUS UNDERTAKING

It is a hard task which confronts the commissioner of education in the first cabinet of the Chinese republic. The new commissioner is Tsal Yuan-Ben, and there is no question but that much of the future welfare of China lies in his hands. It will not be so difficult for his fellow officers of the cabinet to follow the other nations in matters of financial policy, etc. Comparatively few persons in a nation know or care a great deal about how the finances or the foreign relations of its government are administered. To these matters they seem indifferent. But in a reorganization of the educational system of China that nation's millions of people will all, or at least all but a very few, be deeply concerned. Then, too, such sweeping changes are contemplated that opposition is sure to be developed in strong measure. To overcome this sufficiently to carry his point and lead the Chinese forward and upward in the progress of nations is the tremendous task now before the new commissioner of education. The position is not one to create envy, for it is quite sure to bring forth more curses than blessings. People are very slow to understand the significance of new movements, as a rule, and usually it remains for history to set forth the courage and noble zeal of those who lead in all such work for the uplifting of humanity in the mass.



Princess Alexandra Victoria, Duchess of Fife, is the only woman in the world to be made a duchess in her own right. Her father, the Duke of Fife, married Louise Victoria, daughter of the late King Edward and Queen Alexandra. At the death of the duke, without male heirs, the duchy was bestowed on his eldest daughter. Queen Alexandra's brother is King George of Greece and it is said that she is trying to arrange a marriage between the young duchess and her brother's grandson, Prince George of Greece, who was born in 1890. His mother, the Crown Princess of Greece, is a sister of the present German emperor and hates everything English. Needless to say she is strongly opposed to the match. The young duchess was born in 1891.

PRINCESS ALEXANDRA IS DUCHESS IN OWN RIGHT



Bottled Ham. Admiral Peary, we are told by a writer in the Woman's World, used only tea as a stimulating drink on his polar expeditions. The fact offers him frequent opportunity of telling what is said to be his favorite story. I am talking with a man who questions me in regard to my arctic work, says the admiral, and I remark, "Tea is much better than Peebles ham." "Peebles ham?" he says. "What is Peebles ham?" "Did you never hear of Peebles ham?" I reply, and then I go on: "There were two old Scotch women, Mrs. McWhirter and Mrs. McBean, who met on the road one day, and Mrs. McWhirter said, 'Losh, wummen, yer' frae hame the day!'"

"Aye," said Mrs. McBean, "I was just yont at Peebles. Saunders McNabb, o' Peebles, keeps rale guid ham. Oor John, ye ken, likes a bit guid ham, an' is aye yammerin' about the ham being' over fat and over saut."

"Oor Tam," said Mrs. McWhirter, "is the same way. There's nae pleasin' him wi' his ham. Faith, I'll hae ta gie McNabb a trial."

"So Mrs. McWhirter journeys into Peebles, and she says to Saunders McNabb, the grocer, 'Gie us a pund o' yer best ham.'"

"What kind wad ye like?" asked Saunders.

"Oh, just the kind that Mrs. McBean gets," said Mrs. McWhirter.

"McNabb smiled faintly.

"A' richt," said he. "Whaur's the bottle?"—Youth's Companion.

Lion and Mouse.

In the Berlin zoo a mouse was put in the cage of a lion to test whether, as the old stories assert, there was a natural affection between them. The experiment was rather astonishing.

The lion saw the mouse before he was fairly through the bars and was after him instantly. Away went the little fellow, squeaking in fright. When he had gone a few yards the lion headed him off, and this was repeated until the mouse stood still.

The lion then stood over him, studying him with interest, and presently he brought his paw down on the mouse, but so gently that it was not injured in the least. Then the lion played with the mouse, now letting him run a few inches and stopping him again.

Suddenly the mouse changed his tactics and instead of running when the lion lifted his paw, sprang straight at the big animal's head.

The lion, terrified, gave a great leap backward and roared in extreme fright, while the little mouse made his escape. Of the two the lion was the more frightened.