

## 'FOSSIL FALLS' MAKE NIAGARA PUNY TRICKLE

Place Where Tremendous Cataracts Roared Is Found in West.

By Science Service  
CHICAGO, Sept. 3.—Two "fossil Niagara's" that would make the mightiest waterfall now on earth a puny trickle by comparison, once roared in the Grand Coulee, a deep, wide gorge that lies about halfway between Spokane and Seattle.

These extinct cataracts, now represented only by lines of towering dry cliffs, have been studied by Professor J. Harlen Bretz of the University of Chicago, who has presented his report on them to the American Geographical Society.

The water that fed these two great cataracts came from melting glaciers of the great ice age.

Creeping down from the north, the ice for ages had blocked the course of the Columbia river. As the glaciers began to melt and retreat, they released immense quantities of water, which had to find a new watercourse.

Of this necessity was born the Grand Coulee, whose bed, now dry except for a chain of small lakes, is 1,000 feet deep, with a width of a mile at its narrowest point.

### Fifteen Miles in Length

It has a total length of about fifty miles, with an interruption in the cliff walls somewhat more than half way down its course dividing it into an upper and a lower coulee.

The bottom of the Grand Coulee is a fairly even slope, as the bottom of an ordinary river valley would be. It has hummocks and irregularities, and in the rocky floor, there are enormous "potholes" a hundred feet deep.

Potholes—steep-sided, round-bottomed holes in solid rock—are formed in only one way, by the grinding and pounding of boulders kept in motion by the force of falling water.

Bretz, therefore, looked for the remains of a waterfall that might have done such cyclopean sculpturing. He found two, both of tremendous proportions.

### Six Times Niagara's Size

The lesser of the two falls was at the head of the lower coulee. It formed a group of cataracts, rather than a single fall; but when the enormous length of its great "horse-shoe" and all the lesser bendings of the remaining cliffs are measured as a straight line, the total comes to some three and one-half miles, or nearly six times the straight-line width of Niagara Falls.

This tremendous stream leaped from the crest of a 400-foot cliff, more than double the height of Niagara, and subsided still higher. The Victoria Falls in Africa, the greatest known existing cataract.

But mighty as these falls in the lower coulee were, they were surpassed by the Steamboat cataract of the upper coulee. This feature gets its name from a high out-standing rock in front of the cliff. This once was an island, first on the brink, as Goat Island stands on the brink of Niagara today, then left isolated as Goat Island also would be if American and Horse-shoe falls receded at equal rates.

The steamboat cataract was a good mile wider than the falls system of the lower coulee, and more than twice as high. In the days of the late Pleistocene, the waters roared over its cliff in a plunge of 900 feet.

### Plan Irrigation Stream

All this super-Niagara magnificence vanished when the receding glacial front retreated far enough for the water to flow down the present course of the Columbia river, leaving the upper end of the coulee high and dry. The head of Grand Coulee now stands about 500 feet above the water level of the river, and several miles removed from its course.

Bretz tells of a project to put water into the coulee again, not the thundering post-glacial flood, but an irrigation stream that will bring green life to its present dry bottom, and change the farming basis of the region from dryland wheat to irrigated orchards and alfalfa fields.

It is not expected to build a 500-foot dam across the Columbia to do this; a 200-foot dam is expected to be sufficient.

The apparent paradox of getting a 500-foot water lift from a 200-foot dam is explained by the fact that a great pumping station will be installed, run on the 200-foot water head, to lift the irrigation water over the 300-foot "hump" to the head of Grand Coulee.

### COUNCIL PRESIDENT IS SILENT ON BUDGET

Boettcher Says Department Heads Have Been Hard at Work.

No detailed announcement regarding the 1933 budget for Marion county will be forthcoming until the regular meeting of the county council, Sept. 20, Walter C. Boettcher, president, said today.

For the last ten days the council has been considering the appropriation requests submitted by department heads. Each department head has been called into the session and given definite instructions regarding reductions to be made by the council, Boettcher said.

"I have absolutely nothing to say on the budget situation," Boettcher said. "At the time of the regular council meeting, the budget will be ready. I can say that definitely—but that's all."

Boettcher also refused to indicate whether the budget would be reduced, or whether levies would remain within the confines of the \$1.50 limitation law.

### Gone, but Not Forgotten

Automobiles reported to police as having been stolen belong to: F. H. Wineslow, 3224 Bellflower street, Pontiac, sedan, 35-288, from garage in rear of home.

Travis Polk, 1524 North Rural street, Pontiac, sedan, 35-288, from garage on East fifteenth street, near Polk's Milk Company.

Albert Alderson, 1832 South Meridian street, Chevrolet coach, 122-556, from front of home.

Bob Zeller, 2704 North Gale street, Ford sedan, from garage in rear of home.

Carl Hoffman, R. R. 17, Box 56, Maxwell court, Waukegan, from Massachusetts avenue and St. Clair street.

## New Stars Twinkle on Broadway



Three guesses—who is this attractive young ballroom dancer, latest of the stage dancing teams? Remember Blanche Sweet, way back when the movies first began? Well that's she, and her dancing partner is Loe Lorraine. Miss Sweet is starred in Broadway's first play of the new season, "Domino."

### Crop Now Bringing 9 Cents a Pound; Means Money in Farm Pockets.

BY LEO R. SACK  
Times Staff Writer

SAN ANTONIO, Sept. 3.—Texas

pears are blue again, and the folks

are singing "Happy Days Are Here Again," just as if they believed it.

Many of them do believe it. Nine-cent-a-pound cotton is the chief reason.

This is far above the 5-cent cotton of September, 1931, and the 5-cent cotton of a few months ago.

It means money in the pockets of the farmers at the bank and at the country store, new shoes for the children, new clothes for mother and, in many instances, a new automobile.

The farmers then built a "cooperative" line and were alleged to have used materials supplied by the Tipton company.

Right now it is moving upward, and many Texans think it is going.

Unlike the eastern industrial centers, where continuously increasing unemployment figures belie the high hopes stimulated by rising stock market prices, the increase in cotton is not something to anticipate—it is a reality.

The 1932 Texas cotton crop is just 3,826,000 bales, according to the last estimate of the department of agriculture, out of a nation-wide estimated total of 11,306,000.

The Texas decrease is 1,344,000 bales from the 1931 crop of 5,270,000 bales, while the nation-wide estimate is 5,612,000 bales less than the 1931 crop of 16,918,000 bales.

Instead, reduced acreage, lack of money to buy fertilizer, which resulted in lowered yield per acre, and weather conditions are contributory causes to the reduced production.

Texans believe the Sept. 8 estimate of agriculture will show a still further decrease.

Thus, they will send a still

ton permanent above the 10-cent mark.

Wilkoff's Place on Ticket Goes to Ralph Green



Ralph Green

Selection of Ralph Green, Indianapolis attorney, as the Liberty party's candidate for United States senator was announced today.

Green was selected by unanimous vote of the central committee of the party Thursday. He will fill the post vacated by the death of Dr. C. S. Wilkoff, who was struck by an auto Saturday night.

The note, scrawled on rough paper, had first been written as a demand for \$50,000, but these figures were marked over and \$1,000 written.

Newgent ordered that in future the boys refrain from associating with each other.

And they haven't purchased

## BAD ACCIDENTS SERIOUSLY HURT AUTOISTS HERE

### Eight-Inch Piece of Glass Removed From Throat of Truck Driver.

A truck driver from whose neck an eight-inch piece of windshield glass was removed, and a victim of a hit-and-run driver are in critical condition today at city hospital.

The glass injured Cecil Ludlow, 27, R. R. 7, Box 42, driver of a National Bread Company truck, which ran into a truck and trailer parked in the 1200 block West Morris street. The truck is owned by the Akron-Kansas City Motor Freight Company, and was in charge of Dwight Mills, 26, Akron.

Rain on the windshield is believed to have blinded Ludlow.

A compound skull fracture was incurred by Wilbur McDonald, 28, of 375 South Illinois street when he was struck by the truck of a hit and run driver at Kentucky avenue and Drexel street.

Less serious injuries were suffered by Elmer Benson, 52, of 350 Beauty avenue, a deaf mute, also a hit and run driver's victim.

Victim of Hit-Run Driver

Bleeding from lacerations on his head, Benson was found lying in weeds at the end of the New York street bridge over White river.

Benson, while details of the accident are not known, stated he was hit twenty feet when struck by the automobile.

Charges were filed against Miss Clarabelle Lykens, 22, Sixty-seventh and Ferguson streets, after a car she was driving collided with one driven by Alvin Cauldwell, 28, of 1435 North Meridian street in the 4800 block Washington boulevard. Her mother, Mrs. Edna Cauldwell, was injured.

Car Over Embankment

Three persons were treated at city hospital shortly after midnight as a result of injuries incurred when an automobile in which they were riding plunged down an eighteen-foot embankment on the Bluff road near Exchange.

The injured are Mrs. Bessie Bryant, 35, Ben Davis, whose condition is serious; William Maxie, 38, of 1227 Madison avenue, and his wife, Mrs. Delta Maxie, whose injuries are not serious.

GARNERS OPPOSE JACK

Michigan Branch of Family Is All Republican.

DETROIT, Sept. 3.—The family

of Joseph C. Garner, a total of five votes, will not vote for John Nance Garner, Democratic nominee for Vice-President, even though he is a distant relative.

The Michigan Garners have been Republicans for generations, according to Joseph.

Rain Insurance Spurned by Officials of Fair

By Scripps-Howard Newspaper Alliance

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ARREST MANY IN MINE AREA

Oklahoma Situation Is Held

'Fraught With Danger.'

By United Press

MALESTON, Okla., Sept. 3.—

Wholesale arrest of strikers accused of intimidating miners attempting to return to work in the troubled southern Oklahoma coal fields began Friday.

Peace officers described the situation as tense and "fraught with danger."

MOTION PICTURES

GILLESPIE, Ill., Sept. 3.—Miners

of Illinois state fair is down

to a man on a "longshot."

They're banking on Sultan Sol

to keep his harem of sunshine beauties going throughout

fair week against threats of

Jupiter Pluvius, superior mud-

horse.

And they haven't purchased

Bare Escape

"Judgment withheld," spoken by Russell Newgent, juvenile court referee, was a welcome announcement to two boys, 12 and 13 years old, who wrote an extortion note to Guy Montani, a grocer, 2640 North Meridian street.

The note, scrawled on rough paper, had first been written as a demand for \$50,000, but these figures were marked over and \$1,000 written.

Newgent ordered that in future the boys refrain from associating with each other.

STATE MINERS VOTE REVOLT

By United Press

SPRINGFIELD, Mo., Sept. 3.—

Something new in resort advertising is planned by the Young Men's Business Club here. The club will buy thousands of post cards bearing scenes in and around Springfield and will distribute them through Missouri, counting on Missourians to write to other people on the cards.

NAUGHTY CHARLIE RUGGLES!

THE TURNING POINT

Having a savings account may be the turning point in the success of one's ambitions. Start today to build a savings account and by repeated deposits accumulate a balance that will assure a turn in the right direction.

THE INDIANA TRUST Company For Savings

CAPITAL SURPLUS \$2,000,000.00

THE OLDEST TRUST COMPANY IN INDIANA

## Call the Doctor—Quick!



No doubt many formerly well persons in Austria develop "heart trouble" when blond Dr. Maria Ehrenstein (above) appears on the case. She's equally famed as a beauty and as a physician.

## Cut Rate Airplane Rides Offered Times Readers

### Hoosier Airport Trips Will Start Sunday, Continue Through Sept. 11.

Hundreds of Times readers are

expected to take advantage of the opportunity for airplane rides at half price at Hoosier airport Sunday, if weather permits.

Airport officials have arranged to give Times readers regular \$1.50 airplane rides for 75 cents and a coupon, printed herewith, starting Sunday and continuing until Sunday, Sept. 11.

The only requirement is to clip the coupon and present it with 75 cents to the airport, Kessler boulevard and Lafayette road, any time between now and 5 p. m., Sept. 11.

Only government inspected and licensed planes, flown by licensed pilots, will be used.

Rain Insurance Spurned by Officials of Fair

By Scripps-Howard Newspaper Alliance

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