

NEWS OF SOUTH DAKOTA

Business men of Cottonwood have decided to celebrate the seventh anniversary of the founding of the town on August 17.

Earl Nicht, a prominent young farmer near Frederick, has mysteriously disappeared. No trace of him can be obtained.

Benjamin Lunn, a prominent farmer living five miles southeast of Kimball, broke his collar bone by falling from his pony.

George Woodbeck of Marshall brought before Judge Bouck at Sisseton on a charge of selling intoxicating liquors, pleaded guilty and was fined \$100.

The Retail Merchants' association of Sioux Falls held its annual meeting on the 21st, at which time a banquet was served to members of the association.

The German school at Scotland will be opened again this fall. More than \$6,000 of the total of \$10,000 to be raised by the synd to purchase a heating plant and make necessary repairs on the building has been subscribed.

A new Odd Fellows' lodge has been instituted at Delmont. S. W. Rowley of Mitchell, deputy grandmaster of the state, together with large representations of the order from Armour, Tripp, Wagner, and other towns, were present.

Automobile owners around Faulkton have organized a club. The following officers have been elected for the year: N. A. Gardner of Orient, president; W. J. Jacobs of Faulkton, secretary; A. Diller of Faulkton, treasurer; John Dixon of Seneca and J. Freitag of Carlyle, vice presidents.

Among many other important building improvements being undertaken at Vermillion this summer is the rearrangement of the Citizens Bank and Trust company building.

Katy Smith, a stranger in Aberdeen, committed suicide by shooting herself three times in the stomach, at her room in a hotel. She died several hours later in a hospital.

Stockholders in the Butte County Fair association have decided to join the Black Hills association of fairs. Representatives of Pennington, Lawrence, Fall River and Butte counties have inaugurated a plan to make a complete racing circuit.

Bids on electric light bonds at Alexandria have been received and the entire issue of \$16,000 has been awarded to the Minnesota Loan and Trust company of Minneapolis.

The negro who is being held in the county jail at Tyndall, S. D., has been positively identified as the man who shot and killed Calligan, the Sioux City brakeman, near Scotland, S. D.

Waterworks continues to acquire additional industries, the last one being a new cigar factory operated by F. O. Minnaugh, who for several years has been running a cigar store and jobbing the Harkert Cigar company's goods.

Howard Sheaf, a graduate of the University of Nebraska, now taking post graduate work at the University of Chicago, will go to Sioux Falls this fall to head the faculty of the Sioux Falls college.

The whereabouts of Donald Gaunt, better known as "Scotty," of Fort Pierre, is surrounded with mystery. He left there June 12, but left no word as to his destination.

An attendant from the Yankton insane asylum took from Lemmon an old man 91 years of age, not insane, it is reported, but feeble in body and mind as a result of old age.

After sweltering in a torrid heat for nearly four weeks Sioux Falls and its tributary territory was relieved by a downpour which recorded slightly over a half inch. The last rainfall previous was on June 27.

Directors of the New Farmers' Grain company at Alexandria have voted to pay a dividend of 3 per cent on the outstanding stock.

The grading on the Yellowstone trail between Morrison and McIntosh is nearly completed. The work will continue until the road to the Perkins county line is finished.

Exploring the Center of the Earth by Robert H. Moulton



HERE is a man in Chicago who can measure one-five-millionth of an inch—a distance amounting to one-fiftieth of the smallest distance revealed by a theoretically perfect microscope.

He has determined the length of the standard meter so accurately that his figures cannot be subject to a fault exceeding more than one part in 2,000,000.

This man is the first American to receive the Nobel prize in science and the only American who has ever received the Copley medal of the Royal Society of London.

He is Albert Abraham Michelson, Ph. D., Sc. D., LL.D., professor and head of the department of physics at the University of Chicago.

Professor Michelson's experiments to determine the rigidity of the earth are intensely interesting. Science has long needed to know the physical properties of this globe.

Under the now accepted theory of the celestial mechanics, scientists assume that a heavenly body is held in its course by the attractive force exerted by the other heavenly bodies on all sides of it.

The maximum tides in these pipes did not exceed one-thousandth of an inch; but so perfect was the apparatus and so accurate the readings by Professor Michelson that all the variations in the tides were accurately determined.

Professor Michelson's experiments revealed 30 of these variations, which corresponded almost exactly with the variations obtained theoretically by computing the variations in the attractive forces exerted by the sun and the moon.

The practical correspondence of the actual height of the tides with the theoretical height proved that the earth through and through is as rigid as steel and that it yields to outside forces as a perfectly elastic body and not as a viscous mass.

This experiment reveals the imagination and the striking originality of Professor Michelson. The first achievement to bring his name to the attention of the scientific world was his accurate determination of the velocity of light.

The difficulties of spectrum analysis will be realized when it is learned that a single atom of sodium emits 800,000,000 vibrations per second of two slightly different kinds of light.

The echelon spectroscope uses a glass grating—a piece of highly polished glass on which is ruled from 15,000 to 50,000 straight equally-spaced lines to the inch.

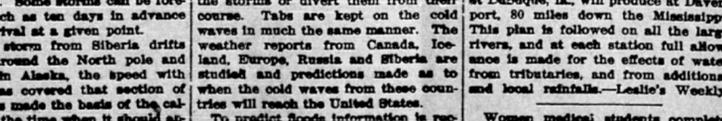
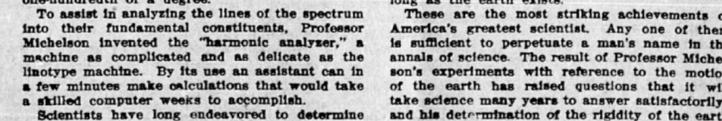
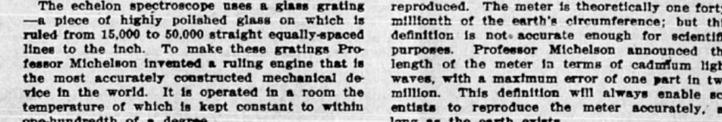
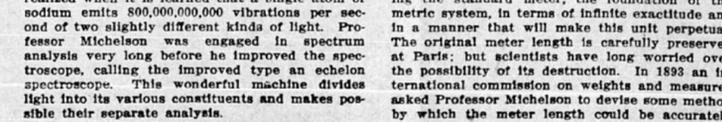
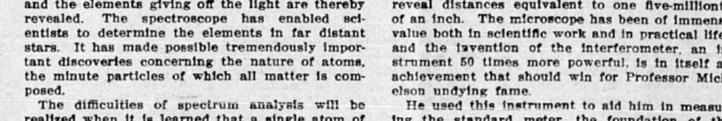
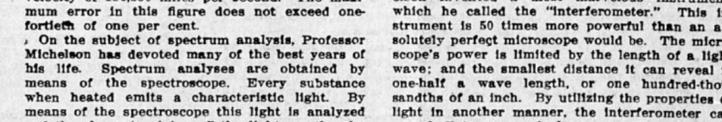
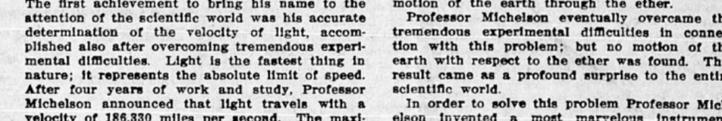
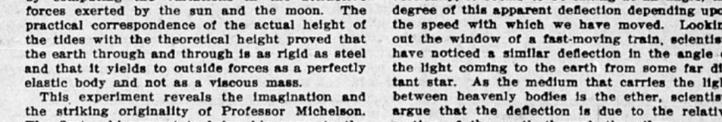
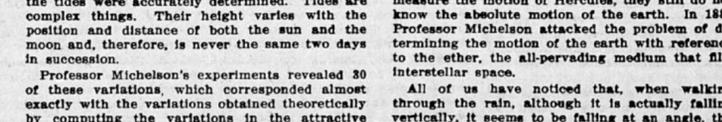
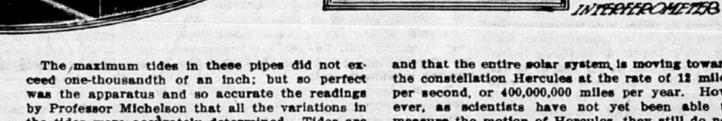
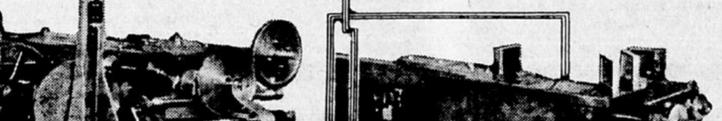
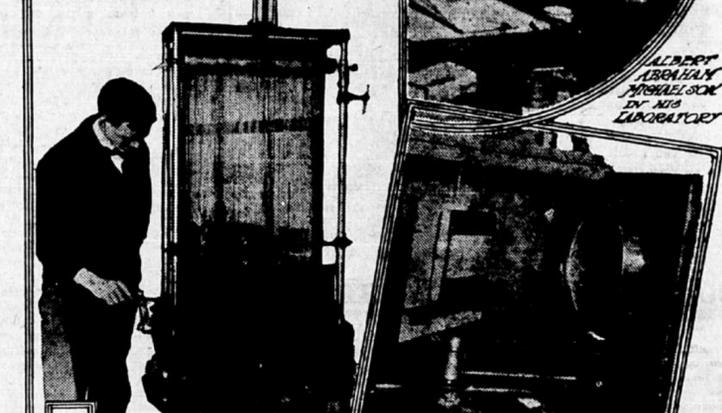
At both ends of the pipes tubes were inserted having glass windows for observatory purposes. The pipes were half filled with water; and the changes in the height of the water were obtained by measuring through a microscope the distance between a pointer inserted just under the surface of the water and the image of the pointer reflected above the water.

It should get to the great lakes, and finally to the Atlantic coast, and each section is warned in advance. Unexpected conditions may delay the storms or divert them from their course.

When a storm from Siberia drifts southwestward across the North pole and reaches Alaska, the speed with which it has covered that section of its course is made the basis of the calculation of the time when it should appear in Washington and Oregon; when it should get to the great lakes, and finally to the Atlantic coast, and each section is warned in advance.

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A CLOUD OF WAR MORE CRITICAL TURN IN THE EUROPEAN SITUATION—SERVIA'S REPLY.

NOW NEAR BREAKING POINT

Government's Action Regarded as the Equivalent to a Declaration of War—Passports Are Handed the Serbian Envoy at Vienna.

London.—The Serbian minister here received a dispatch from King Alexander stating that Crown Prince Alexander, acting as regent, had ordered a general mobilization of the Serbian army.

Vienna.—The sending of his passports to the Serbian minister, M. Jovanovitch, by the Austrian foreign office is deemed equivalent to a declaration of war.

London.—Serbia's reply to the Austrian ultimatum is summarized as follows: 1. Servia agrees to the publication in its official journal on the front page of the formal declaration submitted by the Austrian government.

2. Servia agrees to communicate this declaration to the army in the form of an order of the day. 3. It promises to dissolve those societies which may be considered capable of conducting intrigues against Austria.

4. Revision of the laws governing the press. 5. Dismissal from the army and navy of officers and the removal also of civilian officials whose participation in an anti-Austrian propaganda may be proved.

6. The Serbian government asks for an explanation as to just what part the Austrian officers are to be relied upon to take in the inquiry into the Sarajevo plot, and it is announced that Servia can only admit such participation as would be in accordance with international law and good neighborly relations.

7. To sum up, Servia accepts all the conditions and demands of Austria and makes reservations only regarding the participation of Austrian officials in the inquiry. It does not give its formal refusal to this point, but confines itself to asking explanations.

Finally, if the Austrian government finds this reply inadequate Servia appeals to The Hague tribunal and to the powers which signed the declaration of 109 relative to Bosnia and Herzegovina.

The Serbian note expresses the hope that the response will dispel all misunderstandings that threaten neighboring relations and says Servia has no policy of Balkan crisis.

"The Serbian government," the note continues, "cannot be held responsible for manifestations of a private character, such as are common in all lands and escape official control. The Serbian government has been painfully surprised by the statements connecting persons in the country with the Sarajevo outrage.

Invited to cooperate in the investigation of the crime and was ready to prove by deeds that earnestness of its action against all persons concerning whom communications should be made without regard to situation or rank."

MONEY TO MOVE BIG CROP. United States Will Aid in Disposing of Western Grain.

Washington, D. C.—Money from the federal treasury will be deposited in national banks throughout the country against this fall to facilitate the movement of crops and promote business generally.

Secretary McAdoo announced that he would put out approximately \$34,000,000, and that he stood ready to increase the amount to any extent necessary to meet the country's need.

The secretary's estimate of what will be needed is based upon replies from 6,000 national banks to a recent treasury department circular asking whether any unusual demand for money was expected this year and for what purposes.

Last year the department inaugurated the custom of distributing funds in the crop handling centers, depositing about \$35,000,000 of the \$50,000,000 Secretary McAdoo had decided to use for the purpose.

British Troops Fire on Mob. Dublin.—Three men and one woman are dead and more than sixty persons are in hospitals wounded as a result of a battalion of the king's own Scottish borderers firing into a mob in the streets of Dublin.

Seven of the wounded are expected to die. Among them are three women and a boy of 10. The affair was the result of a gun running exploit of the nationalists volunteers, who were being aided by a mob composed largely of women and youngsters.

New Orleans.—Two human cases of bubonic plague and three rodent cases were reported here by Dr. W. C. Rucker, assistant surgeon general in charge of the plague eradication work, making a total of thirteen human cases and twelve rodent cases since the contagion appeared a month ago.

Mexico City.—President Carral decided upon Gen. Lauro Villar, chief of the supreme tribunal of military and justice, and Judge David Gutierrez Alameda, of the supreme court, as the Mexican government's representatives to the Saltillo peace conference.

INTERNATIONAL SUNDAY SCHOOL LESSON

By E. O. SELLERS, Director of Evening Department, The Moody Bible Institute, Chicago.

LESSON FOR AUGUST 2 THE TRIUMPHAL ENTRY.

LESSON TEXT—Mark 11:1-11. GOLDEN TEXT—"Rejoice greatly, O daughter of Zion; shout, O daughter of Jerusalem, because thy king cometh unto thee." Zech. 9:9, 10.

Mark devotes 233 verses to his account of the last week of our Lord's life and 425 to all the balance. Matthew devotes seven chapters and Luke five. If all of the life of Jesus had been given to us in like ratio it would have taken at least 80 volumes in which to tell us the story.

Today's lesson is the introduction to that week. We must consider his entry in its light upon the whole movement of his life. His instructions how to secure the colt seem to indicate his intention to provoke a demonstration. Though often in Jerusalem before, this was a different occasion, and for a different purpose.

Before he did not provoke his conflicts, now he courts publicity, that he may fasten his claims upon the attention of all.

Test of Faith. "The Lord hath need of him," v. 17. It was a test of faith for his disciples to obey the Lord's command (v. 2), yet they did precisely what they were commanded to do (v. 6). Obedience is the supreme test of discipleship, John 15:14. When the disciples entered the village (v. 1) they found the colt "whereon no man ever yet sat." Jesus knew all and had the keys to the human heart. Perhaps this colt belonged to a disciple, hence the willingness to let it be used for the occasion Jesus was for the first and only time assuming.

Many disciples are not willing to be so explicitly and simply obedient. This obedience is heightened when we remember how the disciples had followed Jesus towards Jerusalem "amazed" and perplexed.

Those who stood by asked very question suggested by Jesus, v. 6 of v. 3. As these disciples cast their garments upon the colt for Jesus to sit upon, they proclaimed their allegiance to him as king.

"Hosanna" as v. 8-11. Literally, "save now," Ps. 118:25, 26. His entry was characterized by a remarkable outbreak of enthusiasm. Before this only the disciples accepted his kingdom claims, now the multitude found their expression of gratification. Passing into the city, sitting upon the colt, he was accompanied by their shouts of praise. Their first word was "Hosanna" their last "Hosanna in the highest." Between these they exclaimed, "Blessed is the kingdom that cometh, of our father David." It has been suggested that this host was made up largely of Galileans, and that theirs was an appeal to the city to receive the one who was coming, hence their double blessing to the king and to the kingdom. Jesus seems to have yielded his whole soul to this glad acclaim.

It was a necessary part of that dignity which should properly be accorded to the Messiah on this his last entry into the Holy City. This suggestion about the Galileans may explain the cry uttered the last part of the week by the citizens of Jerusalem, "Crucify him." Still we feel sure that many of this same crowd joined this latter cry. The use of the word "many" (v. 8) seems to indicate that everyone joined the acclamations of joy. The time is coming, however, when every knee shall bend and every tongue confess him as lord indeed, Phil. 2:10, 11. Many today refuse to accord him his just use of praise.

Effect of Psychology. Some of that crowd were doubtless moved by the "psychology of the crowd," and their devotion was short-lived. It is not hard to imagine the effect this strange procession must have produced upon the city as it moved on to the temple. Some threw their garments upon the ground to pave his way. Others took palm branches (John 12:13) and strewed them in his path. To those of us who oftentimes feel as though we faint would have shared that brief moment of glory, we should recall the fact that a day of permanent triumph is coming in which we shall have a part. Until that glad day we may herald the coming king and the final glorious kingdom.

Some of the Pharisees cried out against this demonstration, Luke 19:39, but the Master replied, "If these should hold their peace the stones would immediately cry out; Luke 19:40. From Luke's account we see that Jesus did not seem to share the joy of that day, Luke 19:40-44. He saw the end from the beginning, and rightly estimated, at its true value, the evanescent adulation of the crowd.

Summary. This is a strange triumph. What a variety of emotion it must have aroused. Those of the disciples, the crowd, the Jewish sects, the Roman soldiers and citizens, and in the breast of Jesus. How different that the triumphal processions of Rome. Heaven also saw the events of that day.

The clothing cast before him speaks of sacrifice on his behalf. The chanting of children's voices were a prophesy of his ultimate victory and triumph. The falling shadows of his life, the on-looking rulers of Israel, already plotting his arrest, must have presented dark and sinister faces.

Was it not filled with loneliness? Did he not know the mistaken belief, the false hopes, the aroused animosity? Yet, he is not alone, for he had the father with him.

STORMS OF FOREIGN ORIGIN

Those Visiting the United States May Develop in Japan, Siberia or Canada.

Most of the severe storms do not originate in the United States. They come from us from the Philippines, Japan, Siberia, Alaska, Canada or the Isthmus of Mexico. Our weather bureau, telegraphic or wireless station of a foreign storm. Station after station of the weather bureau and vessel in the path of the storm report its arrival, so that the general direction and the speed with which it travels can be very nearly determined.

It should get to the great lakes, and finally to the Atlantic coast, and each section is warned in advance. Unexpected conditions may delay the storms or divert them from their course. Tabs are kept on the cold waves in much the same manner. The weather reports from Canada, Iceland, Europe, Russia and Siberia are studied and predictions made as to when the cold waves from these countries will reach the United States.

To predict floods information is recorded as to the amount of rainfall at headwaters of streams. As the rain reaches the main channel the height of the water is recorded from gaugings. Records show that a height of 30 feet at Dubuque, Ia., will produce at Davenport, 80, miles down the Mississippi river, and at each station full allowance is made for the effects of water from tributaries, and from additional and local rainfalls.—Leslie's Weekly.

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