

The News and Observer.

VOL. XLVIII, NO. 62.

RALEIGH, NORTH CAROLINA, SUNDAY MORNING, MAY 27, 1900.

Leads all North Carolina Dailies in News and Circulation

GET UP EARLY MONDAY MORNING

To See the Total Eclipse of the Sun About 8 O'clock.

WAS CALCULATED IN 1849

Line of Totality Covers Only Twelve North Carolina Counties.

WHERE THE ECLIPSE CAN BEST BE SEEN

Wadesboro Chosen by Experts Because it Has Had Less Cloudy Weather For Fifty Years Than Any Other Town in the Range of the Eclipse.

Monday morning May 28th, there will be a total eclipse of the sun. It will begin at 7:38 a. m., and end at 10:10 a. m. The totality of the eclipse will occur at Raleigh at 8:48 a. m. It will last in Raleigh about one minute. "At Wadesboro the totality will last one minute and 31 seconds." Prof. Edward W. Barnard of Yerkes Observatory.

SCIENTISTS IN WADESBORO.

Great Preparations There to Witness the Eclipse Tomorrow.

Professor Barnard has with him at Wadesboro a car load of plates 25x30, and will photograph the corona, which can be seen only when the moon hides it, with a telescope 6 1/2 feet long.

The period of totality of the eclipse varies at different points along the track. At the Rocky Mountains the spectacle will last but about thirty seconds, and at New Orleans the period will have been lengthened thirty-seven seconds. At Union Point, Green county, Ga., the centre of the path for the United States, the time of totality will be ninety-two seconds, while those who are at the Atlantic coast, just south of the city of Norfolk, will be able to continue their observations for 165 seconds.

The great shadow of the moon will cover the sun from our view for 25 miles on each side of the centre. The line of totality covers these counties in North Carolina. Anson, Richmond, Moore, Harnett, Wake, Johnson, Nash, Wilson, Edgecombe, Bertie, Hertford, Gates, Perquimans, Pasquotank, Camden and Currituck.

It covers portions only of these counties: Union, Richmond, Montgomery, Stanley, Cumberland, Sampson, Chatham, Lenoir, Wayne, Greene, Halifax, Chowan, Warren, Franklin, Robeson, Northampton and Martin.

(Special to News and Observer.)

Wadesboro, N. C., May 25.—Everything is in readiness here for observing the eclipse. Wadesboro is today the centre of the scientific men of the world, and the whole town has caught the inspiration of scientific investigation, and the children are talking about the "eclipse," "periods," "fiftieth of seconds," "telescopes," and the like instead of about playing "Knucks" and baseball. It is a body of distinguished and agreeable gentlemen who are here and the people have extended to them the well known Southern hospitality. The visitors are well pleased with the town and people who are showing them every possible attention.

Last night Professors Gore, Venable and Holmes, of the North Carolina University, arrived and will have a tent from which to observe the eclipse. Already parties had arrived from the Smithsonian Institute, Yerkes Observatory, Princeton University, from England, Holland and other countries. Prof. O. J. Bond, superintendent of the Charleston Military Academy, arrived today with twenty-one members of the class of the Academy. In addition, among other visitors are Mrs. Antoinette Ewing, of Claremont College, Hickory; Prof. G. M. Phillips, president of the State Normal School, located at Westchester, Pa.; Prof. Chas. H. Winston and son, of Richmond College, Richmond, Va.; Miss Mary W. Whitney and companion, of Vassar College Observatory.

From Princeton comes a party headed by Prof. C. A. Young, one of the most eminent men in his line in the world. It is composed of Prof. W. Libbey, who has been on several Arctic exploring expeditions; Prof. C. F. Brackett, W. F. Magie and wife, Taylor Read, M. McClenahan, N. H. Russell and W. Fisher.

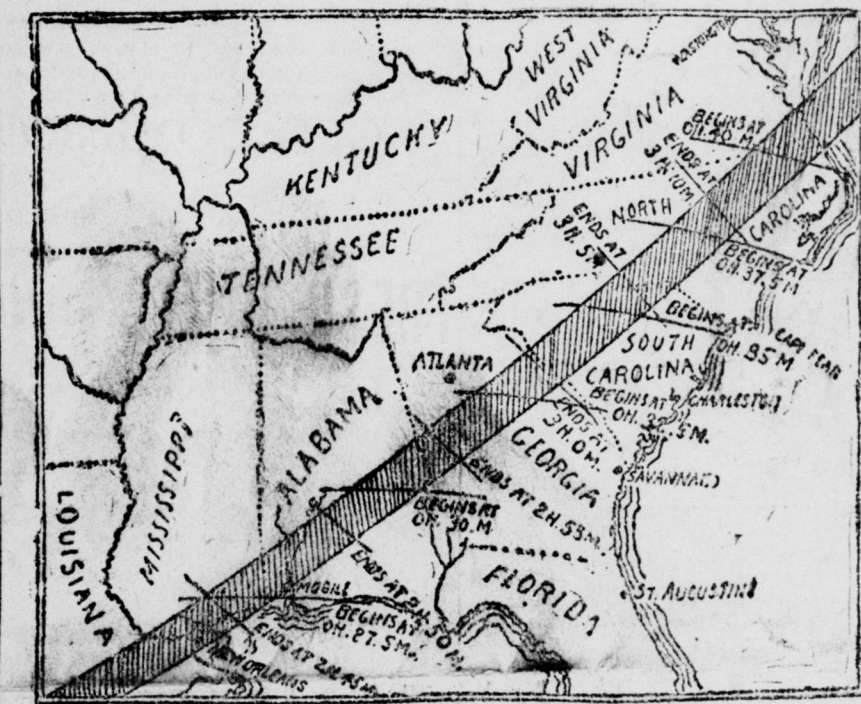
Prof. Edward W. Barnard was the advance agent from the Yerkes Observatory. He arrived two weeks ago to make full arrangements so that accurate photographs can be taken of the eclipse. The instruments are in position on Leak avenue. The party is composed of Prof. Edward E. Barnard, Geo. E. Hale, G. W. Ritchey, Ferdinand Ellerman, Edwin E. Frost, Albert S. Flint and Dr. Geo. F. Isham.

The Smithsonian Institute party, who is the head of the party, has its preparations also on the Leak avenue. They have a 45 foot telescope and will take a reflected image of the sun during the eclipse 135 feet long. The party is composed of M. W. Millie, chief photographer in the National Museum; Mr. Fowle, assistant professor of physics; R. C. Child, professor of physics, but now in the United States Patent Office; DeL. Gill, head of the bureau of American ethnology; C. G. Mendenhall, ex-assistant professor of physics, now professor of physics in Williams College, Mass.; P. A. Draper, electrical engineer; A. Kraemer, instrument maker; C. Smith, carpenter and Prof. Langley, secretary of the Smithsonian Institution.

WHAT ASTRONOMERS HOPE.

Speaking of the presence of many astronomers in Wadesboro, the Messenger and Intelligencer thus tells what they hope to learn on Monday morning:

An attempt is to be made to solve many interesting questions which have never been satisfactorily answered by the observations at previous eclipses. The two most important problems deal with the nature and constitution of the corona and chromosphere of the sun. As is generally known, the sun consists of an extremely large spherical mass, probably solid, which is surrounded by an atmosphere, just as the earth has an atmosphere of air; but that of the sun consists of vapors of metals such as iron, calcium and silver, together with many ordinary gases, such as hydrogen and



THE PATH OF THE ECLIPSE THROUGH THE UNITED STATES.

oxygen. This atmosphere is called the chromosphere. Outside it, and seen on the earth only at times of total eclipses, is a sort of irregular halo, with streamers going off in different directions, all of a brilliant white color, against the blue of the sky. The cause of this corona is not known, nor is there any basis of observation on which to found a theory, so discordant have been previous descriptions.

At Wadesboro this year it is hoped that some decisive results may be obtained. If all goes well we will know that vapors from the different portions of the chromosphere, which are close to the sun, and what is still more important, we may know their condition, whether they are in violent motion or not, whether they are extremely dense or hot, and so on. In regard to the corona, an attempt will be made to see how many different agencies are taking part in it, and to learn if its existence depends solely upon the sun itself. Much other information concerning the nature of the sun will be sought. With the help of all the facts learned this year in this country and abroad, if the weather is favorable, a more satisfactory theory of the sun's phenomena should be possible.

GRANDEUR OF AN ECLIPSE.

A gentleman who observed the eclipse of August 7th, 1869, says of it:

"No one who has not seen a total eclipse of the sun can fully appreciate the grandeur of the occasion. As the light, ray by ray, is cut off, a strange and ghastly darkness comes down upon us; not like the darkness of night, but a violet colored darkness which makes the faces of our neighbors turn ashy pale and gives to the landscape the hues which it takes in a stereoscopic picture. The moment the last ray of light disappears there bursts upon the spectator a vision so marvelously beautiful, so startling by its novelty, that his self-possession and self control desert him."

Pinehurst's Distinguished Party.

(Special to News and Observer.)

Pinehurst, N. C., May 25.—The Johns Hopkins University party, composed of eminent men and photographers, with other scientists, who are here to view the eclipse and take photographs are all here on the ground, in readiness for Monday morning. There have been regular rehearsals and every thing is now in fine shape. Quite a party from Northern parts are expected to reach here Sunday night.

The Eclipse Calculated in 1849.

Baltimore Sun.

A colored diagram of the total eclipse of the sun, which will occur on Monday next, and a record of the calculations of the eclipse, both made a half a century ago, are the unique possessions of Mr. E. H. Norman, president of the Baltimore Business College.

The diagram and calculations were made by Mr. Norman's father, Mr. William Joseph Norman, and are dated December 1, 1849, when the elder Mr. Norman was a resident of Alexandria, Va., for which meridian the calculations were made.

In addition to diagrams showing the

first contact, the maximum phase and the end of the eclipse similar to those published in the Sun of Saturday last. Mr. Norman prepared a diagram showing the orbits of the sun, moon and earth in their respective angles in relation to one another, together with the exact spot in the sun's pathway where the moon appears to cover its light from the earth.

Mr. Norman wrote below the diagrams the result of his astronomical calculations as follows:

"A projection of an eclipse of the sun to occur on the 28th of May, 1900. Beginning of eclipse 37 minutes after 7 o'clock a. m. Greatest obscuration 49 minutes after 8 and 11 minutes after 10. Calculated for the meridian of Alexandria, Va."

SOME FACTS ABOUT THE ECLIPSE.

The Phenomena Will Last One and a Half Minutes. How it may be Viewed Without a Smoked Glass.

Professor Simon Newcomb, the well known astronomer, has a timely and instructive article in McClure's Magazine for May, explaining what astronomers expect to learn from the total eclipse of the sun which is to occur on the 28th of this month.

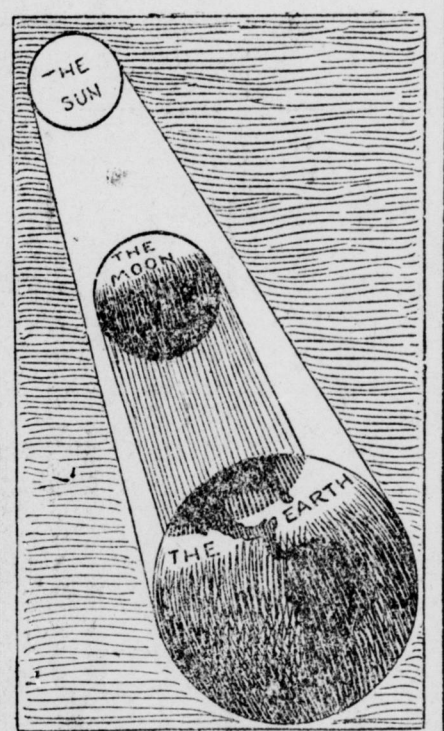
The article begins with a description of the manner in which the eclipse will occur. The moon appears as a dark object, beginning at the left and gradually covers the bright surface of the sun, first



POSITION OF THE PLANETS.

showing a very small dark spot and gradually increasing until only a bright crescent remains of the sun's surface. latter is fully covered nothing remains but a kind of halo or ring of light around the dark circle of the moon. This ring of light is called the corona and astronomers are divided in their opinion as to the cause of it. The settlement of this question is one object of the observations taken whenever the total eclipse is visible.

Another interesting fact about the eclipse is that as the dark circle of the moon gradually covers the bright surface of the sun its edge passes over bright red spots which reappear later as the moon passes off. For a long time astronomers have been puzzled to know what these red spots are and many observations have been taken to learn the cause of this phenomenon. The aid of the spectroscope was sought some years ago, when there was a total eclipse of



POSITION OF THE PLANETS.

The moon in this eclipse appears to be about the size of the sun, and when the sun is visible in India, and the French government sent an eminent astronomer to make observations there. His report was that these red spots were enormous masses of hydrogen gas on the surface of the sun.

The same discovery was made by Norman Lockyer, an eminent English astronomer, and his report of it reached the French Academy at the same meeting when the report of the French astronomer who had made the same discovery in India was received. To commemorate this discovery the academy caused to be struck a medal containing profiles of both Lockyer and the French astronomer.

Professor Newcomb suggests a simple and effective means of marking the progress of the moon across the disc of the sun. He says that if an ordinary spy-glass is reversed and the large end pointed toward the sun a picture of the eclipse will be thrown on a piece of paper or card-board held a few inches below the lower end of the instrument.

This saves straining the eyes, obviates the use of smoked glass and gives a picture of the phenomenon as clear as a photograph. He says that photography will be used to discover any hitherto unobserved appearance about the sun or the moon during the eclipse, and calls attention to the fact that by the aid of photographs many stars, hitherto not discernable, have been located.

The moon comes in for a share of attention during the eclipse, and Professor Newcomb says it will be interesting to discover the mountains on the surface of our satellite. As the moon passes between us and the sun, appearing as a dark circle, its edge comes out clear cut and sharply defined against the brighter surface. In this way a notched, ragged edge shows the mountains of the moon.

Professor Newcomb recalls some interesting facts in the past history of eclipses. In one instance, some centuries before Christ, on the 15th of June, the Lydians and Medes were engaged in battle, when a total eclipse of the sun occurred and the two armies stopped fighting, and for a time were disposed to make peace with each other. This eclipse has been accurately located by astronomers on the date indicated by an inscription discovered on some Assyrian monuments, namely, on the 15th of June, B. C.

This calculation is based on what is known of the rate at which the moon moves. Professor Newcomb says that one of the most important subjects upon which astronomers will seek to get new light by observation of this eclipse is the movement of the moon. They hope to determine more accurately the rate at which it passes through the heavens in order that they may fix with more accuracy and confidence the exact time of events which have occurred on or near the dates of total eclipses.

Professor Newcomb says that when a total eclipse occurs in northern latitudes the chances for a perfectly clear sky, free not only from clouds, but from mists, is nothing like so good as it will be in Georgia, Alabama and North Carolina on the 28th of May. It has been many years, he says, since a total eclipse was visible over a portion of the earth's surface where climatic conditions were so favorable for observation. The Popular Science Monthly, in a similar article, states that the chances for minimum cloudiness are better in Georgia than in either of the other States.

The duration of the eclipse will be very short, lasting only from one to one and a half minutes, but astronomers expect to accomplish as much as they have ever done in other latitudes where the duration of the total eclipse was longer.

For purposes of observation the Professor recommends a spyglass of ordinary power or even a good opera glass. He says that instruments of low magnifying power are better for this purpose than large telescopes.

SONG OF THE WHITE MAN.

By Rudyard Kipling.

[This poem was printed in the Bloemfontein Friend of April 9.]

I. Now, this is the cup the White Men drink, When they go to right a wrong, And that is the cup of the old world's hate— Cruel and strained and strong.

II. We have drunk that cup—and a bitter, bitter cup— And tossed the dregs away: But well for the world when the White Men drink To the dawn of the White Man's day.

III. Now this is the road that the White Men tread When they go to clean a land— Iron under foot and levin overhead, And the deep on either hand.

IV. We have trod that road—and a wet and windy road— Our chosen star for guide, Oh, well for the world when the White Men tread Its highways side by side.

V. Now this is the faith that the White Men hold When they build their homes afar: "Freedom for ourselves and freedom for our sons, And, falling freedom, war."

VI. We have proved our faith—bear witness to our faith— And ours has been the pain, Dear souls for the world when the White Men join To prove their faith again.

The Chowan Baptist Association.

(Elizabeth City Economist.)

We dropped in upon the Chowan Baptist Association, assembled in this place, Wednesday morning, and we were pleased that we went there. The association was well attended by delegates, the audience was large and attractive and the discussions were very interesting. The subjects discussed were ministerial education and the Thomasville Orphanage. The education of young men to the ministry of the Baptist Church was the subject of a report of a committee appointed for that purpose. After the report was submitted Mr. E. F. Aylditt (the Moderator) inquired if any one had anything to say, when Dr. John Mitchell, formerly of Bertie county, but now of Wake Forest, chairman of the Association's Board of Education, arose and delivered an address full of power, facts and information relating to ministerial education. Dr. Mitchell is one of our old friends, who has the distinction of being considered the "best man in the world"—a very rare compliment which we will not undertake to controvert, in his case. He is a sturdy built, stocky old man,

THE AMENDMENT IS CONSTITUTIONAL

One Hundred and Sixty-Two Prominent Lawyers, After Having Carefully Considered It, Say it is Not in Conflict With State or Federal Constitution.

The undersigned lawyers, members of the North Carolina bar, after having examined and considered the provisions of the proposed amendment to the constitution submitted by the Legislature of 1899 to the people for ratification, give it as our opinion that the said amendment is not in conflict either with the State or the Federal Constitution.

We further give it as our opinion that the 4th and 5th sections of said amendment are so connected in subject matter, each so clearly dependent and conditioned upon the other, that both must stand or fall together, and that it is too clear to admit of a doubt that the 4th section cannot stand if the 5th section should be declared unconstitutional.

It is clear this amendment, if ratified, will not disfranchise, either now or hereafter, any person who was himself entitled to vote at any time prior to 1867, either in this State or any State in the United States in which he then resided, provided he registers once before 1908 and does not thereafter become disqualified by crime:

- James E. Shepherd, James C. MacRae, R. M. Doughton, Thos. J. Jarvis, Robert L. Ryburn, Samuel E. Gidney, Harold Hall, J. A. Anthony, Clyde R. Hoey, James L. Webb, E. Y. Webb, R. H. Hayes, H. A. London, W. B. Shaw, J. H. Bridgers, Walter E. Daniel, Walter W. King, King & Kimball, James T. Morehead, Chas. M. Stedman, John A. Barringer, L. M. Scott, Z. V. Taylor, A. M. Seales, D. H. McLean, J. C. Clifford, W. F. Carter, S. P. Graves, M. V. Lanier, W. W. Barber, H. L. Greene, Geo. W. Bower, Todd & Pell, G. L. Park, J. B. Conneill, P. H. Williams, E. F. Aylditt, J. Haywood Sawyer, R. W. Turner, J. B. Leigh, J. M. Brown, R. L. Smith, R. E. Austin, Walter E. Fiemster, Geo. McCorkle, W. B. Galtner, M. E. Lawrence, T. E. Gilman, E. M. Koonce, Frank Thompson, James A. Lockhart, Edward W. Poy, John A. Narron, W. S. Stevens, James A. Wellons, Marsden Bellamy, Iredell Meares, E. S. Martin, Rountree & Carr, Herbert McClammy, Junius Davis, McNeill & Bryan, Bellamy & Peschau, Lee S. Overman, John S. Henderson, T. C. Linn, R. Lee Wright, Walter Murphey, Theo. F. Klutz, Edwin C. Gregory, H. A. Boyd, John A. Kerr, C. C. Lyon, C. M. McLean, M. D. W. Stevenson, D. L. Ward, L. J. Moore, A. D. Ward, W. D. McIver, H. C. Whitehurst, R. B. Waddell, R. B. Peebles, F. R. Harris, C. G. Peebles, S. J. Calvert, H. C. Jones, Armistead Burwell, Heriot Clarkson, Hugh W. Harris, E. T. Cansler, Chas. W. Tillett, W. M. Smith, F. M. Shanonhouse, J. D. McCall, T. C. Guthrie, B. E. Nicholson, W. B. Rodman, Stephen C. Bragaw, J. H. Small & McLean, B. S. Gay, Garland Midgette, H. L. Cook, J. G. Shaw, H. McD. Robinson, D. T. Oates, E. R. McKethan, John D. Kerr, E. W. Kerr, R. W. Cooper, Wm. H. Ruffin, Thos. B. Wilder, C. M. Cooke, R. B. Massenburgh, W. H. Tarborough, W. H. Tarborough, Jr., F. S. Sprull, T. W. Bickett, Thos. D. Warren, Chas. L. Abernathy, W. A. Dunn, S. V. Pickens, Charles French Toms, McD. Ray, A. E. Posey, Walter E. Moore, Coleman C. Cowan, Henry C. Robertson, J. A. Spence, Blair & Luther, Oscar F. Mason, Francis D. Winston, St. Leon Scull, Benj. F. Long, I. F. Dortch, E. A. Daniels, W. C. Munroe, W. R. Allen, Maxcy L. John, Walter H. Neal, John H. Cook, John D. Shaw, Jr., M. H. Justice, Swift Galloway, W. C. Fields, T. G. Skinner, Chas. Whedbee, W. D. Pruden, C. S. Vann, W. M. Bond, W. W. Zachary, W. L. Thorpe, Jacob Battle, T. T. Thorne, A. W. Graham, A. A. Hicks, John W. Hays, H. M. Shaw, W. A. Devin, B. S. Royster, F. P. Hobbgood, Jr., Sinclair & Eaves, D. E. Hudgins, Justice & Pless, G. W. Ward, C. M. Bushoe, T. M. Argo, Robt. T. Gray, S. G. Ryan, Armistead Jones, G. W. Ward,

having passed the scriptural limit of three-score and ten, but speaks with power, emphasis and vigor and we trust he may have many years in store, in which to bless and benefit mankind. He was followed by Mr. Caddell, of the "Biblical Recorder," in an original and forcible speech in advocacy of an educated ministry. He argued that numbers of membership could never supply the necessity of an educated ministry in giving force and influence to the denomination. After the conclusion of his speech he called the roll of the churches for contributions and pledges to the education fund, to which there was a liberal response from all the churches represented. But the speech of the Association on Wednesday was that of Mr. Archie Johnson, representing the Baptist Orphanage at Thomasville. It abounded in argument, eloquence, good strong sense, apposite incident and illustration, and everything that goes to make up a forcible speech. If we had not heard Aycock lately we would say that Archie Johnson was the finest orator in North Carolina. And what is strange in his case is that he is a newspaper editor (Charity and Children) and the general rule is that good editors are poor speakers, and Archie Johnson is both. Nature to him was a kind and liberal benefactor in her gifts. We beg to suggest his name as a candidate for Governor when Aycock's term expires. We were the earli-

est (they say) to mention Aycock's name for the place, and now, if Johnson should some day be Governor, the Economist would be among the prophets and not a false prophet, and its friends will please make a note of it.

St. John's Day at the Oxford Orphan Asylum.

Hon. A. M. Waddell, of St. John's Lodge, No. 1, A. F. & A. M., Wilmington, will deliver the address at the celebration of St. John's Day by the Masons of North Carolina, Saturday, June 23d, on the beautiful Oxford Orphan Asylum grounds. Col. Waddell is one of the strongest, most eloquent speakers in the State. He is patriotic, courageous, gifted. It is expected and earnestly desired that people from all over North Carolina, in great numbers, will attend this celebration. It is always a pleasant occasion. An attractive feature will be a general basket picnic, which was so satisfactory and enjoyable last year. The Oxford Orphan Asylum is now caring for 220 destitute, homeless, orphan boys and girls. Visit this institution and your interest in and efforts in behalf of its work cannot fail to be increased. It is expected that railroad rates will grant special rates, which will be announced later. W. J. HICKS, Supt.