SCIENTISTS STUDIED "CORONA" FROM NEW YORK TO NEW ORLEANS.

THE SHADED PORTIONS SHOW WHAT PART OF THE ECLIPSE WAS SEEN IN SOME OF THE PRINCIPAL CITIES.

CAPE NOME. SITKA. SEATTLE. MINNEAPOLIS. OTTAWA. CHICAGO. BOSTON. PHILADELPHIA. WASHINGTON. NORFOLK.

(Continued from First Page.)

what similar to those observed in India in 1898. There were two on the west of about equal intensity, out to a distance equal to five or six diameters of the sun.

"The upper one of the two to the east was much stronger than the lower one and was observed out to about four diameters. The streamers seemed to be nearer the solar equator than in 1898.

"The shadow bands were distinctly observed inclining from about 28 degrees west of north to 28 degrees east of south, traveling north east."

WASHINGTON, May 28.—The officials of the Naval Observatory here received despatches from their working parties at Pinehurst, N. C., and Barnesville, Ga., immediately after the eclipse of the sun stating that the observations at these two points were entirely satisfactory.

The weather was clear, the instruments worked well and the entire programme of observations was carried through without hitch.

The eclipse as viewed in Washington was quite a striking phenomenon, but was marred somewhat by clouds toward the period of greatest obscuration. The streets were filled with smoked glass astronomers who watched the remarkable display.

CAUGHT THE CORONA AT WASHINGTON, GA.

(Special to The Evening World.)

WASHINGTON, Ga., May 28.—Prof. Robbins got the first contact of the eclipse here at 7h. 2 m. 15.8s. with not more than a half-second interval between first suspicion and conviction. Mr. Hosmer also got the contact successfully on the chronograph. Mr. Edmonds and Rev. Mr. Saville missed the first contact on account of an unfortunate delay in getting their telescopes.

The observation here was in every way successful. The sky around the sun was absolutely cloudless. A light bank of clouds in the southwest gave an excellent opportunity for observing the moon's shadow as it swept across the sky.

The shadow bands were plainly seen as they flickered across the canvas screens. The grandeur of the scene at the first instant of totality, as the wonderful light of the corona flashed out behind the black disk of the moon, was indescribable. The corona was like that of the eclipse of 1889. Two large red protuberances were plainly visible, but only a slight color was otherwise observable.

Mercury, Venus and two other stars were plainly visible. The zodiacal light was indistinctly seen. During the darkest time of the eclipse large print could be read without difficulty.

The times of contact as taken by Prof. Robbins was: First contact, 7 hours 2 minutes 15.8 seconds; second contact, 8 hours 9 minutes 52.5 seconds; third contact, 8 hours 11 minutes 17.8 seconds; fourth contact, 9 hours 28 minutes 15 1-2 seconds; time totality, 1 minute 25.3 seconds.

BEAUTIFUL SCENE IN THE SOUTHERN STATES.

ATLANTA, Ga., May 28.—The eclipse of the sun to-day is visible throughout North America, Europe and Africa, but was total only in some parts of Louisiana, Alabama, Georgia, North Carolina, South Carolina and Virginia in the United States.

It was an event of first importance and was unprecedented in more than one respect. Its path of totality, instead of extending through sparsely settled regions or running over scant expanse of water, crossed six States in a populous portion of the country, all of the region being easily accessible by rail and water.

It has been eleven years since a similar event was witnessed, but the advancement of astronomical science and the marvellous improvements in telescopes, photography and electrical appliances insured more complete observations than ever before known.

The United States Government and all great educational institutions made elaborate and costly preparations to get the best possible observations, and millions of dollars were expended in this way.

STUDIED THE CORONA.

While great interest attached to the eclipse itself the object of the astronomers composing the "eclipse expeditions" from all parts of the country was not alone to observe the passing of the moon before the sun, but the study of the corona.

This particular branch of the many phenomena generally attending an eclipse has always been an unsolvable problem. It is the belief of many astronomers that the corona is a product of the sun, and has nothing to do with the earth or moon, as formerly suspected.

Two spectra, one of bright lines and the other continuous, have been revealed at former eclipses. Hydrogen gas has been indicated, and another element called helium, recently detected in the volcanic rocks of the earth, has been seen.

Of whatever substances the corona may be composed, and whatever may be the true nature of its physical and chemical constitution, it is certain that it is of extreme tenuity. So rare is it that comets in their swift flight around the sun have been known to pass through it without sensible resistance.

Surrounding the sun is a gaseous substance termed by astronomers the "chromosphere." It is believed to be from five to ten thousand miles deep. Projecting through this chromosphere are observed with total eclipses the shoots, or limbs, which rise often to a height of 100,000 miles with amazing rapidity.

TO SOLVE A PROBLEM.

To the accurate observation of this paramount feature of the eclipse every appliance of the instrument-makers' art, combined with the astronomers' knowledge, was directed, in the hope of reaching a solution of this phenomena. Generally speaking the observations taken by the astronomers to-day were confined to three separate lines of work—the old method of telescopic observations, viewing of the eclipse with the naked eye and the photographing of the phenomena of the eclipse.

The path of totality to-day began in the Pacific Ocean, just west of Mexico. It passed eastward across Mexico, and entered the United States near New Orleans, proceeding in a northeasterly direction until it left the continent, close to Norfolk, Va.

Then it crossed the Atlantic, touched Portugal and afterward passed across Northern Africa, leaving the earth finally near the northern end of the Red Sea.

PATH OF TOTALITY.

In this country the cities of New Orleans, Mobile, Montgomery, Raleigh and Norfolk were in the totality path. Besides these cities the path of darkness included thirty other towns which are large enough to have their names on the map. Few, if any, observatory parties were located at the large cities for the reason that they lacked the altitude, and an unobstructed view for any distance was not to be found.

While the eclipse was visible all over the country it was only within a path of about fifty-five miles in width, extending from New Orleans to Norfolk, that the obscuration was complete. It will be readily seen therefore that a difference of five miles in this belt makes a difference of one-fifth in the matter of time in which the obscuration may be witnessed, and a position near the central line of totality increased in geometrical proportion to the stupendous grandeur of the phenomenon.

MANY PARTIES OUT.

The United States Government appropriated liberally for to-day's great work and observation parties were established at three places in the South and at Tripoli, in Africa, by the Naval Observatory. Prof. S. J. Brown, U. S. Astronomical Director, is in charge of the naval parties in the South, which number about sixty persons. Prof. Brown's headquarters are at Barnesville, Ga. The preliminary work, such as selecting a site, erecting tents and installing the instruments, was in charge of Prof. Milton Updegraff.

A carload of costly and delicate apparatus was placed in position, the multitudinous details were completed and the assistants drilled to perfection a few days ago. Three large buildings were erected on a prominence at an altitude of 1,000 feet. A large scaffold was put up and a tent pitched.

In one of the large buildings is the polar axis upon which was mounted various cameras and photographic telescopes. The telescope is revolved slowly by means of a clepsydra or water clock. Two equatorial telescopes for visual observation of the corona were also placed in position in this building. Upon the scaffold the large photo-heliograph with six-inch lenses and forty feet focal length was installed.

There is, of course, a dark room where the plates will be developed, and on this particular branch of work depends the preservation of the records of the all-important event.

PROF. HILL'S PLAN.

A branch of this naval observatory party was stationed at Griffin, Ga., a few miles away, in charge of Prof. G. A. Hill. Prof. Hill's temporary observatory is on the estate of Georgia's experiment farm, two miles and a half from the centre of Griffin. This is also a high point.

Both to the east and west the country is open and afforded a splendid view, not only of the eclipse itself, but the shadow as it appeared from the west could be distinctly seen for miles. The station was selected for the express purpose of making spectroscopic analyses of the various phenomena of light. In this particular the work of the Griffin station differed widely from that at Barnesville.

The third Government station was located at Pinehurst, N. C. Prof. A. N. Skinner was in charge and his work for the most part was of the same character as that performed by the Griffin Observatory.

Prof. Skinner has been on the ground for two weeks or more, his chief work being to superintend the erection of one of the largest cameras ever constructed. This station is manned by five members of the observatory staff and a number of distinguished specialists, among them Dr. Chase, of Yale. The eclipse station of the Cabot Observatory was located at Silham, Ga.

The party was sent out from the home of the observatory, Oakland, Cal., by Prof. James Dalber, a noted astronomer of San Francisco, and members of the Royal Astronomical Society, of London. Prof. Charles Burckhalter is in charge of the party.

A BIG TELESCOPE.

The permanent staff of the Yerkes Observatory of the University of Chicago located their station at Wadesboro, N. C., with Prof. Edward E. Barnard in charge. Prof. Barnard placed in position a magnificent photographic telescope of six-inch aperture and focal length of sixty-two feet. This telescope is capable of producing pictures from sixteen to twenty inches in diameter.

A delicate apparatus for measuring the heat radiation of the corona was also set up.

Massachusetts Institute of Technology sent a delegation in charge of Prof. A. E. Burton. Prof. W. H. Pickering directed the party sent out by Harvard. He was assisted by J. R. Edmunds and J. R. Atwell, of the same institution.

Blue Hill Observatory, Boston, sent out A. L. Rotch and party. Their work was confined to meteorological observations, a study and record of the shadow bands and the velocity of the eclipse wind.

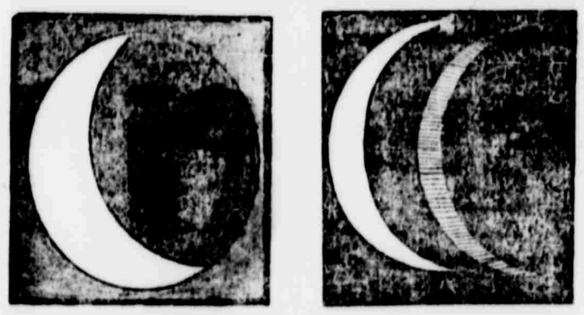
SCARED THE NEGROES.

Workers in the Fields Fell Down and Prayed, Thinking Last Day Was at Hand.

(Special to The Evening World.)

RICHMOND, May 28.—The eclipse of the sun created consternation among the negroes. Many working in the fields fell down and prayed, thinking judgment day was coming. Many ignorant whites were also badly frightened.

A DOUBLE ECLIPSE "SNAPPED" BY CAMERA.



Two remarkable photographs of the obscuration of the sun taken about 9.15 A. M. from the dome of the Pulitzer Building by The Evening World's special photographer. The duplication of the sun's crescent was startlingly apparent every time a particularly thin cloud passed over the crescent. The fainter eclipse was caused by the reflection.

How Queer It Looks.

It's a Bird.

The Camera Fiend.

"Rubber!"

M'KINLEY SAW IT.

Presidential Party Viewed the Eclipse from the Deck of the Dolphin.

FORT MONROE, May 28.—President McKinley and party watched the eclipse from the Dolphin near Lambert's Point, and Secretary Gage and party from the lighthouse tender Holly.

The Dolphin came over from Norfolk at 9.55 and after a salute from the Kearsarge passed on up the bay for Washington.

The President withdrew from Old Point late yesterday afternoon and determined not to leave the Dolphin. He and Mrs. McKinley and Mrs. Hay smoked glass for the entire party last night and had much fun.

VASSAR DIDN'T SEE IT.

Students All Had Smoked Glasses, but the Clouds Wouldn't Roll Away.

POUGHKEEPSIE, May 28.—The eclipse of the sun was not visible in this section owing to the cloudy weather which prevailed from sunrise.

This condition caused great disappointment at Vassar College, where all the students had prepared smoked glasses to view the eclipse.

ACID KILLED BABY BOY.

Found Dying from the Poison and the Police Are Now Investigating.

Charles Kolmbacher, three and a half years old, died at the home of his parents, at Milburn, yesterday of carbolic acid poisoning. The authorities are making an investigation.

A stepsister, twelve years old, was the only one at home when the child took the acid. Her story is that the little one was playing in the street. She saw nothing more of him until she heard him screaming and ran out. His mouth was burned. He died two hours later.

WHAT NEW YORKERS SAW OF THE ECLIPSE.

The scientific observation of the sun's eclipse, according to reports received by The Evening World from all points, has been most successful. Clear weather obtained along the entire path of totality, a strip of country forty-five miles wide, reaching from Norfolk, Va., to New Orleans, La.

In this city thousands of camera enthusiasts were out taking snapshots at critical moments. Some excellent photographs were taken from the dome of the Pulitzer Building.

The Weather Bureau also reports clear weather in the totality strip.

SEEN PERFECTLY HERE.

The promise of the dawn that there would be a clear sky for the eclipse was partly broken, but it was all the better, for the view of the moon crossing the sun's rays was perfect.

Hosts of flying clouds gathered in the east at 7 o'clock and, driven by a strong northeast wind, hid the solar spectacle from the sky-gazers in this vicinity at times. At other times they so softened the strong light that the view was perfect with the naked eye.

The roofs of downtown office buildings were filled with people by 7.30 o'clock. They did not seem to mind the cold breeze blowing, but with every known optical contrivance gazed toward the east. There was a big crowd on hand early to watch from The World dome. There were men with portable telescopes looking like 16-inch naval guns, others with single and double marine glasses, spyglasses and even opera glasses.

Every educational institution in the city, even the smallest primary school, had made preparations to observe the eclipse. In the primary schools smoked glass and short talks on the display were the rule.

talks on the display were the rule.

Few schools of Manhattan, Brooklyn and Jersey City held regular session this morning. Every effort was made to convey to the youthful mind a clear idea of the phenomenon. In the streets crowds stood about looking up at the sky with pieces of smoked glass that they used only when the clouds had cleared away.

Long before the hour of the first shadow there was a crowd in City Hall Park anxiously peering into the sky.

There were expressions of regret at 7.53, the time the first phase was due, when a particularly vicious regiment of clouds camped right betwen the sun and the gazers. There was no gazing through them.

For fifteen minutes the watchers stamped their feet impatiently and said things about those clouds. Then as if moved by the remarks the heavy bank rolled away and there came a shout.

Plainly shown in the upper right-hand corner of the great orb was a black disk sharply cutting a crescent from the light. Sifted through the cloud banks it was softened until all glasses were thrown away. Another battalion of clouds came along. They rested in the line of vision for a few minutes only. The disk had grown larger when it was flashed upon the earth again.

This was the day's programme. As if a curtain were being raised and lowered quickly, the clouds appeared and disappeared all the morning. At 9 o'clock the sun looked like a new moon in the first quarter and the rim of light ever narrowed. It may have been a failure for scientists working to take photographs, but the eclipse of 1900 was a great success from a layman's point of view.

ECLIPSE PROVES MOON TABLES ARE INCORRECT.

WADESBORO, May 28.—Prof. Barnard, of Yerkes University, after the eclipse stated that the totality period was slightly shorter than calculated, which proved the moon tables to be slightly incorrect. All the principal work was photographed and the programme was completely carried out.

Many photographs were taken by all the parties at intervals, and especially the corona. Several telescopes were used in trying to discover more satellites between the sun and the planet Mercury.

Of the actual results nothing can be told for some time. A special train from Charlotte brought 400 persons to follow the eclipse.

Observations were made by scientists from the Smithsonian Institution at Washington, the English Astronomical Society of London, Yerkes Observatory, Princeton University, Charleston (S. C.) Military Institute, and a representative from the Toronto (Canada) Astronomical Society was also at work.

The eclipse furnished a beautiful sight and the observers united in pronouncing the conditions perfect.

Seven sketches were made of the corona and six photographs taken by Harrison W. Smith.

The success of the observations here was wired to London, England, in one minute by direct wire from the cable office in New York City.

FORT MONROE WILD OVER WEIRD SIGHTS.

FORT MONROE, Va., May 28.—The sun was totally eclipsed at 8.53 o'clock in a cloudless sky. Thousands of people crowded the piers and ramparts to watch the phenomenon, and at the moment the sun was snuffed out an involuntary cheer arose and every vessel in the Roads whistled an accompaniment.

The period of totality was about thirty seconds, during which time a tiny star hung just below the magnificent corona, which glowed around the inky disc. Twilight settled on land and water, and the skies took on wonderful after sunset tints.

Then, as though by magic, a star of fire blazed out on the southern boundary of the disc and the eclipse was over.

FOREIGN OBSERVERS GET SOME GOOD RESULTS.

DAIX, Tripoli, Africa, May 28.—The corona is similar to that of 1889. Shadow bands, biograph and small cameras entirely satisfactory. Moon's shadow visible on sky.

LONDON, May 28.—The conditions in London for observations of the sun's eclipse were fair.

The day was somewhat cloudy, but at 2.47 P. M. the sun shone out brightly and the circular shadow over the disk was remarkably clear-cut.

The sun was intermittently obscured, but the observers had ample opportunities to obtain valuable results.

MADRID, May 28.—Intense interest was displayed in the solar eclipse here. A number of excursion trains were run to Argamasilla, Elche, Navalmoral and Plasencia, where astronomers from all countries of Europe assembled.

M. Flammarion represented France and Sir Joseph Norman Lockyer, Great Britain.

Enormous crowds of sightseers occupied the different points of vantage. The influx was so great at Plasencia that many had to sleep in the railroad cars.

Bright sunshine and a cloudless sky prevailed everywhere. The British astronomers arranged to take photographs every ten seconds.

M. Flammarion estimates that some time must elapse before the complete results of the observations are known.

WHAT EDDY'S KITES TOLD.

Eclipse Decreased Air's Electricity, Humidity and Temperature and Increased Wind's Velocity.

William A. Eddy's meteorological and electrical kite observations of the condition of the air at the time of the eclipse were begun at Bayonne, N. J., to-day at 5.15 A. M., when the temperature was 51 degrees.

At 6.30 it reached 60 degrees and declined to 58 degrees by 7.30 A. M. There was a further fall of three degrees during the oncoming of the moon's shadow up to 9.10 A. M. At 9.35 A. M. the temperature arose to 56 degrees with the passing off of part of the observation.

The humidity increased from 83 per cent. at 7.30 A. M. to 94 per cent. at the time of greatest obscuration. The air became drier with the return of the sun, and the humidity declined to 83 per cent. at 10.35 A. M., when the moon's shadow had passed off.

The observation of the electric condition of the air was interfered with by a heavy, cold gale of wind which wrecked two kites and wires in succession at 8 A. M., but not before a one-eighth inch electric spark had been drawn from the wire at 5.45 A. M.

Mr. Eddy says the moon's shadow decreased the electricity in the air, increased the moisture of humidity and lowered the temperature three degrees. It also increased the wind velocity from ten to forty miles an hour aloft.

Real estate for sale? Sunday World Wants will put your offer before the public eye. Three million people will see it.

HARD BLOW FOR DEWEY.

Supreme Court Throws Out Claim for Big Bounty.

WASHINGTON, May 28.—The Supreme Court has decided against Admiral Dewey's claim for the maximum bounty in destroying the Spanish fleet in Manila Bay.

The court, in its decision, holds that the American guns and naval force were superior to those of Admiral Montojo and that the Spanish land batteries did not count for anything in the fight.

The effect of the decision is to deprive the Admiral and the men engaged with him at Manila of half the amount claimed by them.

Chief Justice Fuller delivered a dissenting opinion.

BENHAM ON TRIAL AGAIN.

Cool and Collected, the Alleged Wife-Poisoner Watches Selection of Jurors.

CANANDAIGUA, N. Y., May 28.—Howard C. Benham's second trial for the murder of his wife, Florence Benham, at Batavia, Jan. 4, 1897, opened at the Canandaigua Court House to-day, Judge J. Warren Houghton, of Saratoga, presiding.

The 228 jurors in the regular special panels about filled the Court House, and no spectators were allowed in the room. The forenoon was taken up with the examination of jurors who desired release from duty.

Benham was calm and cool and is looking well.

COOGAN W.N'T TALK.

When Asked About $100,000 Contribution to Campaign Fund He Says "I Have Nothing to Say."

President Coogan, of the Borough of Manhattan, said he had nothing to say this morning about his promising to contribute $100,000 to the Democratic campaign fund for the election of Bryan.

Since the publication of the story Mr. Coogan has kept out of the way of reporters. When he appeared at his office to-day, several attempts were made to get him to admit the truth of the report. He threw up his hands dramatically and exclaimed:

"I have nothing to say."

"Have you been asked to contribute?"

"I have nothing to say," with another wave of the hands.

CHINESE WIN FIGHT.

Can't Be Forcibly Inoculated with Anti-Plague Serum, Federal Court Decides.

SAN FRANCISCO, May 28.—Federal Judge Morrow has granted an injunction to prevent the federal and local health authorities from discriminating against the Chinese in the matter of precautions against the plague.

This means that the Chinese cannot be forcibly inoculated with anti-plague serum, and that they cannot be prevented from entering or leaving San Francisco by the Federal Quarantine officers.

SECRETARY YOUNGS HURT.

Gov. Roosevelt's Confidential Man Struck by Falling Bar in Hotel.

SYRACUSE, May 28.—William J. Youngs, secretary to Gov. Roosevelt, was injured last night in the Hotel Ten Eyck, by being struck by a falling bar.

A physician was summoned and a deep wound in the secretary's head sewn up. Col. Youngs is not believed to be dangerously hurt.

Lydia E. Pinkham's

Vegetable Compound cures the ills peculiar to women. It tones up their general health, eases down overwrought nerves, cures those awful backaches and regulates menstruation.

It does this because it acts directly on the female organism and makes it healthy, relieving and curing all inflammation and displacements.

Nothing else is just as good and many things that may be suggested are dangerous. This great medicine has a constant record of cure. Thousands of women testify to it. Read their letters constantly appearing in this paper.

ELEPHANT OFF A TRAIN

Sport Broke Open His Car Door and Fell Out.

ALLENTOWN, Pa., May 28.—While Bostock's circus was en route to Newark, N. J., to-day, from Wilkesbarre, over the Lehigh Valley Railroad, Sport, a forty-year-old elephant, broke open the car door between Coplay and Hokendauqua and fell from the train.

The train was stopped, and it was found the animal had a fractured hip. It was lifted to the car by the aid of a crane. During this work the Buffalo Express came along, and in passing broke off a car door on the circus train.

The door fell on Eugene Victory, of Brooklyn, a circus employee, crushing his left leg so badly that it had to be amputated.

BOERS UP IN SENATE.

Wellington Argues that Congress Should Take Action in Favor of Republics.

WASHINGTON, May 28.—Mr. Wellington (Md.) in the Senate to-day called up Mr. Teller's resolution expressing sympathy for the Boers and declaring a desire that the Government of the United States should extend its friendly offices to both Great Britain and the Transvaal with a view to bringing the war to a close.

Mr. Wellington maintained that Congress would not have performed the full measure of its duty if, before adjournment, it did not redeem its pledge to give the people of Cuba a free and independent government; if it did not declare its policy as to the Philippine Islands to the holding of which by the United States he was unalterably opposed, and if it did not take definite action in favor of the Boers.

MARRIED ON STATE LINE.

Couple Had an Oklahoma License, but Bride's Home Was in Indian Territory.

GUTHIE, Okla., May 28.—A novel marriage ceremony is reported from near Cushing. Miss Olive Miller, daughter of J. H. Miller, a wealthy cattleman living upon a ranch in the Creek country, was to be married Friday evening to J. K. Cline.

The bridegroom-to-be went to Stillwater, Okla., and secured a marriage license, and when it was handed to the officiating minister a few hours before the hour appointed for the wedding he expressed doubts as to the legality of a marriage performed in the Indian Territory on an Oklahoma license.

It was fifty miles to the nearest point to secure an Indian Territory license and but five miles to the Oklahoma line, so after a brief consultation the entire bridal party and guests rode to the line, where the wedding was performed under the branches of a spreading oak, after which all returned to the Miller ranch for the wedding supper.

AUTO SCORCHER FREED.

Magistrate Discharges Lawyer Who Thought His "Mobe" the Empire State Express.

While running his automobile down Fifth avenue at fourteen miles an hour Henry H. Valentine, a lawyer, of 44 East Fifty-seventh street, was chased and arrested by Bicycle Policeman Van Keuren yesterday afternoon.

He was dismissed with a reprimand from Magistrate Meade this morning at the Harlem Police Court.

Ladies' Dep't.

(at Broadway and 13th Street Store).

Extraordinary Values for Tuesday, May 29th.

Ladies' Suits, in light gray and tan homespuns and venetians, silk lined jackets, collars and revers, at $15.00.

Ladies' Suits, black cheviots, all silk lined, new Eton styles, $15.00.

Silk Waists, in new pastel shades, really worth $10.00 and $12.00, now at only $5.00 each.

Hackett, Carhart & Co.

Three BROADWAY Stores. Cor. 13th St. Cor. Canal St. Near Chambers.

DIED.

METZ.—On Sunday, May 27, at 11.15 P. M., Rev. H. METZ.

Funeral May 30, 1 P. M., at 62 West 125th st. Interment St. Michael's, Astoria.