THE COMET.

Astronomers in Tears and the Public Miserable.

UNDER A CLOUD ONCE MORE

Private Explanation of the Celestial Disappointment.

Reasons Why the Comet Belongs to the Feminine Gender.

SCIENTIFIC VIEWS—THE SPECTROSCOPE.

Among the Stars at the Observatory.

The curtain of clouds was drawn down again last evening and the comet remained in happy seclusion. An old friend of her's, Jupiter Pluvius, wished to spare her the occasion of seeing the American Republic celebrating Independence Day. She was therefore unconscious of hearing the Declaration and of the mountebanks who make the occasion a means of lifting their little heads above the dead level of their fellows. She heard nothing of the fierce storm of firecrackers that swept every street in the city, and she was left in quiet privacy to enjoy the delightful music of the spheres. There were hopes toward evening that the clouds would break and make away in a body to the horizon. As fast as one set scudded off another set was revealed immediately above, and then another above that, so that it would appear the amplest precautions were taken to screen both the head and tail of the comet from observation. Old Probabilities being engaged celebrating the Fourth no arrangements were made for a more satisfactory condition of things. Astronomers wept in private, but consoled themselves with the reflection that the reign of Jupiter Pluvius would soon be over. Of course thousands felt keenly mortified at the

ACTION OF OLD PLUVIUS,

for the programme with many was to picnic at Coney Island and spend the evening up a tree or on a housetop gazing on this beauteous wonder of the heavens. However, there are some few nights left still, and the great hope is they may prove clear and satisfactory. This comet has engagements elsewhere, but she has promised Professor Eastman, of the Washington Observatory, to unfold her tail and give the multitude, without putting them to the expense of opera glasses and telescopes, a better look at her comely face.

THE SEX OF THE COMET.

There is no occasion to enter into an argument to prove that the comet belongs to the feminine gender. The dead set she made on the sun, who is an old bachelor, is evidence, not exactly of her sex, but of one of its characteristics. She carries a tail, and so does every lady's dress. She is coy and bold by turns, inconstant, erratic and perverse. As Virgil says, "*Varium et mutabile genus.*" She knows not her own mind an instant, and when you think she is madly in love with old Sol, straightway she flies off to Mars, gets tired of him and picks up acquaintance with Mercury. Finally she is found in a flirtation with old Jupiter, and that's the way her sex was determined. Then observe her love of admiration—her excessive vanity—showing herself off before every star in the universe.

THE ASTRONOMERS IN EUROPE

have heard of her and she has been received with open arms. They know how to prize such phenomena. It is the first body of the kind they have had an opportunity of investigating satisfactorily by means of the spectroscope. No comet brilliant enough to give conclusive results when subjected to spectral analysis has come within telescope length of the earth since the invention of that extraordinary instrument. The present comet has been carefully followed, without being persecuted, with the spectroscope since her first appearance, with results which the observers consider highly satisfactory. Since it was first remarked, down to the present hour, this comet has presented

A CONTINUOUS SPECTRUM,

which experience has demonstrated to be indicative of bodies in a state of red heat—such as an iron ball, for instance, just after it is withdrawn from a furnace. Three brilliant lines traverse the spectrum, apparently giving proof that the nucleus is surrounded by nebulous rings. In the spectroscope the tail of the comet presents the appearances identified with gaseous bodies in a state of combustion, mixed with a scarcely sensible quantity of solid incandescent matter. It is questionable if we have among us any scientific men who will give the public such a clear sketch of the nature and habits of comets as in this day of astronomical research it is only fair to expect.

ASTRONOMERS AT LOGGER HEADS.

Three well known astronomers have been found already at variance. Will the tail strike the earth or will it not? One says he thinks it will, and sweep away all the Boston bluelights, the New York politicians and the Philadelphia lawyers. It is to be hoped this professor's belief in the efficacy of the tail will prove true. Another professor says the comet is travelling south (probably to rectify affairs in South Carolina), and that its tail will be at a high elevation. It will send down mementoes as it passes in the shape of meteors and shooting stars—all good shots and ready to enter at Creedmoor.

PRODIGIOUS TRAVELS.

This comet has come perhaps fifty billions of miles to see us, and is travelling at the rate of 700,000 miles an hour. According to M. G. Rayet, Professor of Astronomy in the Observatory in Paris, she was when seen by him a very faint apparition, and of a circular form, with a central condensation very marked, forming a luminous point, the diameter of nebulosity being two minutes. The light was so faint that it was difficult to perceive the existence of a spectrum. Since then the comet has been continually approaching both the sun and the earth, and its brilliancy is regularly increasing. The original discovery was made by M. Coggia, at Marseilles, on the 17th of April. Since then the comet has travelled 900,000,000 miles on a bee line for this planet. How far she had travelled up to the period of her discovery it is impossible to say; but if Daniel Pratt, the great American traveller, had covered so much ground his election to the Presidential chair would be certain. A doubt is, however, thrown on the previous feats in travelling which this comet may have performed. M. Rayet declares that at the time of her discovery she was only three minutes in diameter and was forming a tail. She had not yet entered fully into the harness, but was, no doubt, doing her best and was stirred by a noble ambition to have her head and tail spectroscoped by the Washington Observatory.

THE BEAUTIES OF THE COMET.

M. Rayet further remarks that the light seen through the spectroscope gave a continuous spectrum from the orange to the blue (spectrum of a solid nucleus), traversed by three bright bands (spectrum of a gaseous nebula). This spectrum is well recognized in comets, but it differs from others in its dimensions and in the relative brilliancy of the different portions. Thus while the continuous spectrum of the nucleus is in general large and diffuse, it is in M. Coggia's comet very narrow. Moreover, the luminous bands, instead of being sharply defined on the side, the most refrangible are terminated both toward the red and the violet by fine lines. This fact, especially prominent in the middle band, the longest and most brilliant, was very striking.

As the HERALD reporter observed the comet, and was the first to recognize the resemblance which the immediate centre of the nucleus bore to an opal, whose shifting tints include the colors here named by M. Rayet, orange and blue, and, for that matter, all the primary shades, he can easily recognize the accuracy of observation in the Paris astronomer's remarks.

AN UNCOMMONLY BRIGHT SPECTRUM.

But he did not stop there. M. Rayet gave further attention to the approaching stranger, and, under favorable atmospheric conditions, he observed that the comet had a round very bright nucleus (it being equal to a star of about the eighth magnitude), its edge sharply defined by the surrounding nebulosity. The position of the nucleus could be observed with the same exactness as that of a fixed star. This point was surrounded with a nebulous envelope of about four minutes in diameter, its brightness decreasing regularly from the centre to the edge. This envelope is prolonged on the side opposite to the sun into a tail to a distance of eight minutes from the nucleus. The brightness of the comet (which is about four times greater than when discovered) must be considered to furnish so bright a spectrum. The continuous spectrum corresponding to the nucleus is remarkably narrow, almost as narrow as that of a star seen in the same instrument. It recalls the spectrum of a star of the sixth magnitude, but without color towards the extremities. The spectrum extends on both sides beyond the three bands.

SENSATIONAL ASTRONOMY.

Now, while M. Rayet confines himself to a purely scientific analysis of the comet, Professor Parkhurst, while dealing in logarithms abundant enough to set the comet crazy, says that it was formerly supposed that if the head of a comet struck the earth it would destroy it. Then he continues that modern discoveries prove that even such fears have little foundation. This is questionable. If the people of this brave city of New York saw a comet head down and tail up coming straight on for Manhattan Island they would tremble until they shook their shoes off. But when the Professor says that less than two years ago the earth was actually

STRUCK BY THE HEAD OF A COMET

he should have stated where the head struck. He naively observes, "Not one of us knew it." It must have been a soft headed comet, and if the Professor has the smallest clew to the place where the head struck he should start off on a voyage of discovery and find the fragments of the skull. Mr. Bergh is in need of such specimens for his museum. He has several heads there already—calves' heads, horses (Third avenue) heads—but he would certainly go into ecstasies over the head of a comet.

THE PROPER USE OF THE SPECTROSCOPE.

From Professor Parkhurst to Professor Rayet is quite a step, the one residing in Paris and the other in New York; but yet there is an interest in the recommendation of M. Rayet in regard to the use of the spectroscope, which might be profitably regarded here among our astronomers. He remarks that if instead of placing the slit of the spectroscope across the nucleus so as to obtain at once the spectra of the nucleus and the envelope, the slit is placed across the tail, a spectrum of three bright bands is seen, as already described, without, however, a trace of continuous spectrum, and each is separated by dark intervals. In the tail there is, therefore, no solid incandescent material in sensible quantities.

A Visit to the National Observatory—A View of the Interesting Stranger Through the Comet Seeker—"A Perfectly Lovely Comet" — Interesting Statement of Professor Hall.

WASHINGTON, July 4, 1874.

Startled by a rumor from Great Salt Lake that the comet now visible in our northwestern skies after nightfall would envelop the moon or brush the earth with its tail before its departure into the realms of everlasting night, your correspondent was puzzled "what to do about it," when, to his great relief, he received instructions from the HERALD office to settle the question in a call upon Admiral Davis and the Professor at the National Observatory and, in securing, through them, an interview with the comet itself. The other morning, accordingly, the narrator called at the Observatory and, waiting upon Admiral Davis, informed him of the object of the visit. The gallant Admiral, distinguished for his courtesy no less than for his bravery, answered, "Certainly, sir; any information respecting this comet which we can give you we will give you cheerfully." Your correspondent was then referred to Professor Eastman, from whom, after a pleasant conversation upon the comet, comets generally and the Observatory, we separated, to "come up at eight o'clock in the evening of Thursday, the 2d inst., if the skies are favorable; for here, you know, we are entirely subject to——"

"Old Probabilities?"

"Yes, to Old Probabilities, as they call him."

THE VISIT AND THE INTERVIEW.

Thursday evening proved too stormy to make any observations. On Friday morning—the heavy thunder clouds of the previous night having, with their free discharges of electricity, cleared the sky, giving promise of a bright firmament after nightfall—the writer went up the National Observatory, and, finding Professor Hall on duty, asked him for the favor in behalf of the HERALD of another chance this evening for a telescopic inspection of the comet and of his services in the observation for two of the HERALD corps. The Professor answered, "I shall be glad to serve you, should the skies be favorable and I think they will be; and I shall expect you at about eight o'clock." Thanking the Professor, the narrator came away, and, making the necessary arrangements for the evening, awaited the appointed hour. A few minutes after eight, with his colleague, he was at the Observatory and found Professor Hall at his post of duty. "You are in time, gentlemen," said he, "for the twilight has not yet gone down; and, as you see, that heavy bank of clouds may spoil our expectations of a pleasant interview with the comet. I think, however, that in a short time those clouds will disappear, and that you will have a satisfactory interview with our celestial stranger. Meanwhile, I think you will be gratified with an observation of Jupiter and Venus, which are not obscured by the clouds."

We were in the dome of what they call the "small equatorial," a splendid telescope, hardly small even in comparison with the "great equatorial," in another dome of the building, but distinguished from the other as the "small equatorial." This instrument is in a movable dome on the highest part of the Observatory, while outside, around the base of the dome, at a commanding elevation and within a strong railing, there is a spacious flat for observations with the naked eye and the "comet-seeker."

JUPITER.

Our first observations through the equatorial were of that king of the planets of our system, the great Jupiter. And a king he appeared in his majesty, as large as the moon, in a soft, mellow, silvery light, with his kingly belts around him and three of his four moons in full relief attending him. The fourth was out of view behind him. They are very small compared with the bulk of the great planet; but they stood out in the deep, dark sky round and bright and in beautiful relief. And how fearfully deep and dark the sky appeared behind them! Our next observation was of

THE GODDESS VENUS,

nearer the western horizon, and she appeared as a gibbous moon, or as the moon in her third quarter. But her silvery light was brighter than that of Jupiter; because she is so many millions of miles nearer the sun than he. If there are, or if there were, inhabitants like ourselves upon Venus, our planet would appear to them something larger and brighter than she appears to us, and with this equatorial, even our moon, a round little silvery spot, would to them be visible.

THE COMET THROUGH THE COMET-SEEKER.

"Now," said Professor Hall, "the clouds are clearing away beautifully and our interesting stranger, the comet, is coming out in fine relief. Let us go out on the platform and take a peep at him through our comet seeker." We went out, but our first impressions were from the general sights and sounds around. Immediately below us on the south was the malarious Potomac in shadow, and a concert was going on in its semi-stagnant flats and shallows of millions of frogs. Beyond were the darkened hills of Arlington, and westward the lights of Georgetown. On the northward the boundary hills of Washington stood out darkly defined, while to the eastward the lights of streets and avenues and various tall buildings, through a stretch of two miles to the Capitol and Capitol Hill, gave to the city an imperial aspect. But we had come to see the comet and there he was, a fascinating little interloper in the heavens, even to the naked eye.

"Gentlemen," said the Professor, "this is our comet seeker," putting his hand affectionately upon a telescope fixed upon the parapet, and looking for all the world like a mountain howitzer. "You see we can turn him and twist him about in any direction, and no comet coming within long or short range of the observatory, high up or low down though he may be, can escape him. Now he has this comet fairly within his grasp, and you will see that it is a handsome comet, and a dashing fellow withal, bound to go where he has made up his mind to travel."

We took a good look at the comet and repeated it over and over again, through the "comet seeker," and the sight was positively charming. There was first a round, well defined nucleus of soft, white light, and from it there was next, streaming out from the sides or from the end towards the sun, a broad, beautiful halo in the form of an elongated palmleaf fan, or like the spray from a fountain. To the naked eye the comet and its tail appeared hardly over a yard or two in length. Through the comet seeker the nucleus was a soft white globe, and the streaming tail from it was increased to an apparent length of half a mile and to a corresponding width, the upper portions of the tail curving out and down from the sides most beautifully. And there was no flaw in it, no inequality; but the comet and its fan-like tail were harmoniously lighted and proportioned, and all in clear relief, only the general outline of the tail so gradually faded away that it was difficult to mark the exact line where it melted in the dark sky.

Admiral Davis brought up his wife for a look at the comet through the "comet seeker," and she expressed the general opinion of the company in pronouncing it "perfectly lovely." Several officers of the army and navy were present, and one enthusiastic crippled soldier, who had hobbled up to the top of the observatory on his crutches, said the labor was nothing when compensated for it by a look at the comet through the "comet seeker." Compared with the brilliant, silvery shining light of Venus, or with the clear white light of Jupiter, that of the comet is soft and pale, a sort of phosphorescent light, and yet it is very distinct and broad and beautiful under the "comet seeker."

We next took an observation of the handsome stranger through the long tube of the equatorial. But here the nucleus was so widely enlarged as to become comparatively dim, and to extend our observations to all the tail we had to take it by sections, two or three hundred miles apparently at a time, the real length of the comet and its tail being now over six degrees, and rapidly lengthening under the miraculous power of the glorious sun, as this wandering satellite approaches him in acknowledgment of his sovereignty; but only to wheel off again, after paying its respects into its unknown orbit in the boundless abyss of space.

"When will this comet return, Professor?"

"We cannot tell," he answered, "for all that we now know of him he may return to us in five, ten or fifty years, and he may not return for a thousand years to come; but delicate as his substance is and whatever it may be this comet, experience from other comets teaches us, may travel his appointed orbit for even thousands of years. We have yet to find out their substance and their ultimate purpose and destiny."

Professor Hall then took us down into the library, and from a recent paper of the French Academy, by M. Rayet, submitted by Leverrier, he read to us Rayet's report of his application of the test of the spectroscope to this comet, from which it appears to be a light gaseous substance, whose constituent elements still remain to be determined.

"At what distance is the comet from the earth at this time, Professor?

"It is within 60,000,000 or 57,000,000 of miles from us to-night, or nearly half way between us and the sun. By the 19th of July it will be about 30,000,000 of miles from the earth, and it would then to us be a truly magnificent spectacle if within the range of our vision after nightfall. But by that time it will have moved, to us, below or so near the horizon at nightfall as to be only partially visible here, if visible at all in the twilight. It is moving rapidly southward and to the horizon."

"What is its velocity at this time?"

"It is moving at the rate of more than 2,000,000 of miles a day, or at the high speed, in round numbers, of 92,000 miles an hour, which for one hour is nearly four times the circuit of our globe."

"Is the recent report from Professor Parkhurst substantially correct?"

"Yes, in his statements of facts in reference to the comet he is substantially correct; but as to the play of his imagination I have nothing to say."

The Professor then took us into the chronometer room and opened to us a large box of chronometers, arranged in rows. They were set to Greenwich time (for the Greenwich longitudes), and, as they marked a quarter past three o'clock, we were admonished without going farther that it was about ten P. M., and so, thanking the Professor for the time and the attentions he had shown us, we wished him good night.

Admiral Davis pronounces this a beautiful comet. Professor Eastman says it will be, a few days hence, a splendid comet. Professor Newcombe, involved in larger objects, "does not take much stock in this comet;" but Professor Hall, whose special field of duty is among the comets, with his "comet seeker," is enthusiastic over it as a most interesting stranger and a perfect beauty, and growing more and more beautiful and interesting from night to night, under the wonderful and mysterious power, attractive, expansive and repulsive, of the sun.

The Great Comet of 1843 and the Meteorological Shower of 1833—The Prophecy by Miller of the End of the World.

WASHINGTON, July 3, 1874.

To the writer of the following recollections of the great comet of 1843 the little comet of 1874 is indeed an insignificant interloper. On St. Patrick's Day, 1843, this witness left Washington, as a young journalist, on a venture to New York. Stopping with a friend for the night in Baltimore, he was introduced in the evening at her house to an intelligent and interesting lady, who, as the first topic of conversation, introduced the great comet, which was then flaming in the western sky, with a tail which to the naked eye seemed to sweep across nearly one-fifth of the firmament, and, in the absence of the moon, completely eclipsing everything in the heavens. The lady introduced the celestial stranger with the inquiry—

"Let me ask you, sir, what is your opinion of this wonderful and, to me, this alarming comet? Do you think, as the Second Advent people contend, that it can be sent as a warning of the coming of the day of judgment?"

The writer, without pausing to think of the possible consequences, answered, in substance;—"It may be so. The prophet Miller bases his theory of the Second Advent upon the prophecies of Daniel, which, you know, culminate in the day of judgment. These prophecies have been taken up by the prophet Miller, and in applying a fixed time to the fulfilment of each he finds that they have all been fulfilled except the coming of the day of judgment, which, in the order of these great events, he finds must be in this very year, 1843. And this comet is held by these believers in the prophet Miller, or Second Advent people, as a warning in the sky of the impending judgment. They say that the wisest astronomers have failed to give any notice of the approach of this comet; that it comes as much a surprise to them as to the most ignorant people, and that, therefore, it is something entirely out of the regular order of things in the heavens. Such is the reasoning of these Second Advent people, and there may be something in it. Who can tell?"

THE SIGN IN THE HEAVENS.

The narrator was next detained at Philadelphia on the night of the 18th of March in a heavy snow storm, and was most of the next day on the railway train in working through the snowdrifts of New Jersey. At night, on the steamboat from Amboy, the comet shone out in splendid relief, the sky being exceedingly clear under a roaring March nor'wester. Down below there was a gathering of Millerites, some thirty, more or less, singing, praying and exhorting in preparation for the fast approaching day of judgment. One of their preachers said that among the signs on the earth was this late wonderful snow storm in the middle of March, while the awful sign in the heavens becoming more glorious from night to night was this great comet, threatening to set the world on fire. They could now see it for themselves in all its sublime majesty, and by twos and threes they all came on deck to see it, some of them praying audibly and thanking God for this glorious manifestation of His coming, and all of them returning to their hymns and prayers in the forward cabin below.

THE ASCENSION ROBES.

To the best of the writer's recollection, it was in April that he met the Millerites again at a camp meeting of the Society on Long Island, some three weeks after their prayer meeting on the steamboat. At this camp meeting the comet was constantly referred to as the infallible sign of "the second coming of the Son of Man," and of the rising of the saints in their ascension robes (of ten cent muslin) to welcome him. Most of the brethren and sisters, if not all in the camp, had their ascension robes in readiness. So that they were white, they said, the quality or the nature of the fabric made no difference. Cheap cotton, however, was the prevailing article. By referring to a file of the NEW YORK HERALD of April, 1843, this writer's account of that Millerite camp meeting will be found.

A week or two later the writer was saddened by the information that the interesting and intelligent lady who had asked for his opinion on the comet at Baltimore had been reading up the prophecies of Daniel and the interpretations of Miller, and, becoming fully convinced that the judgment day was near at hand, had prepared her ascension robe and was awaiting the trumpet of Gabriel to rise with the saints to the kingdom of heaven.

IDLE FEARS.

But the great comet of 1843 quietly passed away, and was not followed by any greater terrestrial disturbance, even in 1844, than the election of James K. Polk over the great Henry Clay for President of the United States. But such a comet as that at this day would be the universal sensation of the civilized world. To the naked eye the nucleus of that comet in March was larger than Jupiter, though not so bright, and his tail, like the stationary trail of a great meteor, seemed to stretch across a fifth or a sixth of the firmament, and, with a graceful curve and with a gently increasing width to the extremity, which made it exceedingly beautiful.

THE GREAT METEOROLOGICAL SHOWER.

But even this great comet of 1843 was a meteorological trifle compared with the sublime storm of meteors of November 13, 1833, of which the writer, then a boy, had the good fortune to be an observer. He was roused from his sleep by the cries of a frightened negro at the door.

"Wake up, wake up, all of you. De stars is fallin' from heaven. De judgment is come. Wake up, and de Lord have mercy on us all."

"Well, Sam, what are you doing there?" cried the master of the house. "Have you been out stealing, and do you come to confess?"

"Yes, master, here's de bunch of chickens, got out de coop. No use now. De judgment is come. De stars is fallin'. For de Lord's sake, I call you all to git up and pray for de Lord to save us."

This was at two o'clock in the morning, and from that hour till daylight the writer, on the roof of an outbuilding, sat watching the "falling stars." They did not fall at the rate of five or six thousand in an hour, nor five or six hundred in a minute, but by the thousands of millions within range of the eye every second, over all the sky during the time of our watching. Imagine a heavy, steady, northeast rainstorm changed into a storm of fire and you have it, excepting the occasional erratic and larger meteors playfully shooting through the descending mass. The meteors a mile or so away appeared to descend to the ground or near it before they were extinguished, while overhead they went out, apparently, hundreds of feet from the earth. Towards daylight the alarm among the citizens became general, the church bells called the people to prayer, and the streets in the breaking dawn were thronged with people obeying the awful summons.

To him who vividly remembers that storm of meteors of 1833, or even the great comet of 1843, this little stranger of 1874 is, indeed, but a passing trifle among the wonders of the skies.

What Professor Swift Reports—There is No Danger of the Earth Being Destroyed—The Heavenly Pedestrian's Travels.

[From the Rochester Union and Advertiser, July 3.]

Professor Swift, who resides at the corner of Ambrose street and Saratoga avenue, was interviewed by our reporter last evening and much valuable information was obtained from him—a peep of the comet obtained through his fine telescope, also of Jupiter and his moons, with other heavenly wonders. Professor Swift has for the past fifteen years been engaged in searching for comets, and discovered this one one before its discovery in Europe had been announced in this country by Coggia. He laughs at the sensational articles that have been published in the New York and other papers over the signatures of well known astronomers. The observations last evening showed that the tail had increased in length from the previous evening some three or four degrees, and that it was a tenth brighter. It is approaching us direct, at the rate of 1,800 miles a minute, or 1,296,000 miles every day, and to reach the earth's orbit it has yet to travel 26,000,000. That it will extend that distance during its visibility, Professor Swift does not believe. If it does the cometic matter is so rare that the earth and all that is therein will be insensible to it. And another contingency—that the earth may not be at the right point in its orbit to become immersed. But the way that tail increases in length is something fearful to contemplate—half a million miles per day—and the wonder will be nearest the sun on the 10th of this month. The disc of the comet is more planetary than stellar, and has a nucleus which is very bright, and from the fact that its orbit is parabolic it is visiting us for the first and last time.

Professor Swift is of the opinion that the tail is splitting—that the prospects are that it will have more than one tail to its kite. Last evening there could be observed on the right of the comet, nearest the sun, a bunchy nebulous mass, which is the "rooting" of a new tail undoubtedly. The tail is wide in proportion to its length, but the ratio of width to length is now rapidly changing. The perihelion distance of the comet is about 63,000,000 miles, or a little within the orbit of Venus. Should the tail increase in width, of which there is no danger, and not be curved too much, then we might get a little whisk of it—but only astronomers would know it. Business would go along as usual and a possible electrical display might be noticed. But, as before remarked, the substance of the tail is too thin to hurt anybody, and then the tail is hollow. It is similar to attaching a length of stove pipe to a fair sized pumpkin—illuminating both. The pumpkin might hurt the moon or the earth by striking it, but the stovepipe would not kill a flea, and be itself smashed in the bargain. So thin is the tail that, looking through Professor Swift's telescope, a fine one by the way, last evening, the stars could be seen.

But this comet is a very important and large one, and in the next two weeks more will be discovered in regard to the physical nature of comets than has been learned in 4,000 years before. The spectroscope will be brought into service from every observatory in this country and Europe.

On the 10th of July it will reach the nearest approach to the sun at a distance of 63,000,000 miles. Longitude of perihelion, 272; of node about 120 degrees; inclination of orbit to the earth's orbit, some 68 degrees. The apparent motion is so slow that only a small portion of its visible orbit has been seen. Professor Tyndall's predictions that sometime during its journey we shall be "enwrapped in the hazy glories of its tail" will not be verified. The separation of material particles from the head forms the tail, and in this the heat of the sun doubtless has some influence.

NEW YORK CITY.

Owen Kearney, aged forty, residence unknown, fell down yesterday at Fourteenth street and Third avenue and received a bad cut on the head. He is supposed to be mortally wounded.

Milton McKenna, aged forty-four, of No. 565 Court street, Brooklyn, fell down the steps at the basement of No. 164 Chatham street yesterday, fracturing his right leg. He was removed to the Park Hospital.

A young man, name unknown, while bathing at the foot of Seventh street, East River, early yesterday morning, caught cramps and would have been drowned but for the timely rescue of Thomas J. Dunn, son of Detective Dunn, who happened to be passing in a boat at that time.

Hugh Cannon, aged fifty-five, of 161 East Forty-sixth street, was struck by a New Haven train yesterday, at Fifty-second street and Fourth avenue, while trying to rescue two children from being run over. He was dangerously injured and was removed to Bellevue Hospital by the police.

LONG ISLAND.

Bishop Littlejohn will to-day administer the rite of confirmation to a number of candidates at St. Mark's church, in Islip.

The old Peconic House, at Greenport, has been opened for the season by Mr. J. C. Smith, who had a grand reception on Wednesday evening.

The Rev. Charles S. Brown, of Cold Spring, Putnam county, whose son was drowned in a pond at Northville last week, has given directions for the burial and the erection of a suitable monument over the remains of young James Allen, who lost his life in trying to rescue Mr. Brown's son. Both bodies have been taken to Cold Spring for interment.

Elijah Rideford, aged seventy, living two miles from Greenport, who has a wife living at Orient, but from whom he has been for some time parted, left the house yesterday with a razor, and, going to the Sound Shore, drew the weapon across his arm above the elbow, cutting a frightful gash and nearly severing the large tendons, but missing the artery. He then cut several gashes, one very deep, across the lower side of his wrist, and finding that he had not yet opened the artery, he cut gashes on the upper side and around the wrist, fairly girdling it with wounds, but still failing to reach the artery. He then returned to the house and crawled into bed, where his groans attracted attention, and a surgeon was called, who sewed up the wounds. The man will probably recover, but will lose the use of his arm.

An unknown woman, apparently between fifty and sixty years old, was found drowned in the Sound at Inlet Point, about two miles west of Greenport, on Friday afternoon, by a fisherman named Conklin, and Coroner Skinner, of Cutchogue, held an inquest; after which the body was decently buried in the old cemetery at Greenport. She was evidently an Irish woman in good circumstances. She had on a black alpaca dress with narrow lace ruffles at the neck and wrists; new Congress gaiters of cloth, tipped with patent leather, white stockings of Irish make, white cotton overskirt and drawers, Irish flannel underskirt and white cotton chemise. She had long hair, dark brown mixed with gray, light complexion and blue eyes. A small sum of money and a number of articles were found on the person. Among the latter—which may serve to identify her—a Catholic rosary, a paper folded around a lock of hair, and a billhead receipt of William H. Norcross, of Hallowell, Me., for $17, from Charles Sweeney, for a tombstone. Around her neck was also a tape string supporting a charm and a trunk key.

STATEN ISLAND.

Sixty lots, plots and houses were sold at the recent Edgewater tax sales, on leases ranging from one to one thousand years.

Last evening, as a young man named William Brown was standing outside of a window sill at a house in Stapleton, trying to unhang a shutter, the sill gave way and he fell from the third story, breaking his left arm in three places and severely injuring him otherwise.

Fault is found with the Aldermen of Edgewater for not seeking to enforce the law regarding the tax on dogs. There are a great many howling and useless curs about the village and it is likely that the people will take measures for their extermination should the Aldermen not soon do so.

The large property known as Renfrew Farm, near Four Corners, comprising fifty-one acres, has been purchased by a Mr. Hill, of New York, for $8,000, and a Mr. Markham, of New York, has purchased the Freeman estate, on the Richmond road, opposite the Finger Board road, eight acres and residence, for $16,000.

The new race course at New Dorp is now nearly completed. A close wooden fence, six feet high, inclosing the entire grounds, is finished, and a neat rail is being erected around the track for the whole distance, half a mile. The erection of the stands is to be commenced immediately, and the association expect to have their grand opening at an early date.

The competition between the two ferry lines now running to the north shore of Staten Island is working serious inconvenience to the public. The boats come and go without regard to schedule and trust to luck for passengers. The only really reliable way to reach Staten Island, Bergen Point, Port Richmond or Brighton is by railroad and ferry across the Kill von Kull. Correct time is everything to a business man.

MURDEROUS AFFRAY IN NEWARK.

New York Ruffians on the Rampage—Three Men Seriously Stabbed.

Between five and six o'clock last evening wild excitement was occasioned in Newark by the report that several men had been murdered in the course of a small riot which occurred on South Orange avenue, near South Tenth street. Investigation proved that the affair, though serious enough, was not quite so bad as reported. It appears a gang of six young men, hailing from New York and in appearance as "hard" a looking set as could well be found anywhere, visited Newark yesterday. They called in a saloon kept by one Desch, on South Tenth street, and after being supplied with drinks refused to pay for them. This led to considerable wrangling, and finally the roughs seized glasses and chairs and commenced smashing them promiscuously over the heads and persons of those in the place besides themselves. To the sidewalk the fight was pushed, and then the strange ruffians drew knives and commenced hacking right and left. Meanwhile an immense crowd collected, and after a while the police put in an appearance. The sight of the blue coats drove the rowdies off, and they tried to escape. Three of them succeeded and three more were caught by Officer Koening and a comrade. These were taken to the station house, where they gave their names as Michael and John Welsh and James McQuillien. The two first say they came from Hoboken. It was found that John Gordon, a saloon keeper, had received a fearful cut in the arm, eight inches long; Phillip Hoffman, a butcher, a dangerous stab in the side, and an old man named John Heaney a fearful gash across the head. The Welshs and McQuillien are youths not more than out of their teens.

COLORED JUBILEE IN JERSEY.

The colored people of New Jersey, to the number of about 1,000, fully one-half being females, had a celebration of their own yesterday on the Waverley Fair Grounds, under the auspices of the Presbyterian and Baptist churches of Elizabeth, of which Rev. Messrs. Lynch and Wallace are pastors respectively. In the afternoon addresses were made by Rev. W. F. Butler and Rev. H. H. Garnett, both of New York.

SHIPPING NEWS.

OCEAN STEAMSHIPS.

DATES OF DEPARTURE FROM NEW YORK FOR THE MONTH OF JULY.

Steamer.	Sails.	Destination.	Office.
Calabria	July 8.	Liverpool	4 Bowling Green
Hermann	July 8.	Bremen	2 Bowling Green
Holland	July 9.	London	69 Broadway.
Holsatia	July 9.	Hamburg	61 Broadway.
City of Montreal	July 11.	Liverpool	15 Broadway
Britannic	July 11.	Liverpool	19 Broadway.
Canada	July 11.	Liverpool	69 Broadway.
Washington	July 11.	Havre	55 Broadway.
Rhein	July 11.	Bremen	2 Bowling Green
Idaho	July 14.	Liverpool	29 Broadway.
Goethe	July 14.	Hamburg	113 Broadway.
Scotia	July 15.	Liverpool	1 Bowling Green
Silesia	July 16.	Hamburg	61 Broadway.
Algeria	July 18.	Liverpool	1 Bowling Green
Celtic	July 18.	Liverpool	19 Broadway.
City of Brussels	July 18.	Liverpool	15 Broadway.
Greece	July 18.	Liverpool	69 Broadway.
Wisconsin	July 21.	Liverpool	29 Broadway.
Cuba	July 22.	Liverpool	1 Bowling Green
Australia	July 22.	Liverpool	69 Broadway.
City of Chester	July 25.	Liverpool	15 Broadway
The Queen	July 25.	Liverpool	69 Broadway.
Ville de Paris	July 25.	Havre	55 Broadway.
Schiller	July 28.	Hamburg	113 Broadway.
Abyssinia	July 29.	Liverpool	4 Bowling Green

Almanac for New York—This Day.

SUN AND MOON.			HIGH WATER.	
Sun rises	4 34		Gov. Island	eve 12 49
Sun sets	7 33		Sandy Hook	eve 12 04
Moon rises	eve 11 29		Hell Gate	eve 2 34

PORT OF NEW YORK, JULY 4, 1874.

ARRIVALS.

REPORTED BY THE HERALD STEAM YACHTS AND HERALD WHITESTONE TELEGRAPH LINE.

Steamship Britannic (Br), Thompson, Liverpool June 25 and Queenstown 26th, with mdse and passengers to H J Cortes. June 29, lat 49 14, lon 37 07, passed a Galton steamship bound east.

Steamship City of New York (Br), Lochead, Liverpool June 23 via Queenstown 24th, with mdse and passengers to J G Dale.

Steamship New Orleans, Clapp, New Orleans June 28, with mdse and passengers to Clark & Seaman.

Steamship Mississippi, Crowell, New Orleans June 27, with mdse and passengers to Frederic Baker.

Steamship Leo, Dearborn, Savannah July 1, with mdse and passengers to Murray, Ferris & Co.

Steamship South Carolina, Beckett, Charleston July 1, with mdse and passengers to J W Quintard & Co.

Bark Kestrel, Faulkner, Buenos Ayres May 1, via Barbados June 21, in ballast to H J De Wolf & Co.

Bark Agil (of Bermuda), Frith, Bermuda 10 days, with produce to Middleton & Co. June 29, lat 39 15, lon 67 54, spoke bark Qvos (Nor), hence for Queenstown.

Brig Lizzy (o Prince Edward Island), Irving, Point-a-Pitre (Guad) 17 days, with sugar to Morris & Alshman.

Brig Renshaw, Sylvester, Sagua 9 days with sugar to R A Robertson & Co. July 1, lat 37 25, lon 74 30, spoke brig G S Berry, from Matanzas for Portland.

Schr H P Baker, Raymond, Montego Bay, Ja, 14 days, with logwood to J H Winchester & Co.

Schr S A Paine, Brown, Cat Island 8 days, with fruit to Monteil & Son; vessel to B J Wenberg.

Schr Wm Rice, Pressey, Eleuthera 6 days, with fruit to I R Staples.

Schr Hattie E King (of Calais), Crowley, St John, NB, 6 days, with lumber to Gorham Boardman.

Schr A M Dickinson, Dickinson, Corpus Christi 32 days, with wool and hides to Evans, Hall & Co.

Schr Mary Louisa, Gaskill, Washington, NC, 4 days, with naval stores to Zophar Mills.

Schr Lizzie Florence, Lippincott, Richmond.

Schr S W Townsend, Townsend, Richmond.

Schr Isle of Pines, Steelman, Virginia.

Schr Mary Miller, Dayton, Georgetown, DC, for Hudson.

The steamship Rhein (Ger), from Bremen and Southampton, which arrived 3d inst, reports had westerly winds the entire passage. June 30, lat 42 35, lon 48 40, passed four large icebergs, the smallest of which was between 200 and 400 feet high and 3 miles in circumference; July 3, 50 miles E of Sandy Hook, passed steamship Denmark (Br), hence for London.

Passed Through Hell Gate.

BOUND SOUTH.

Steamship City of Dallas, Hines, Fall River for New York. Is consigned to C H Mallory & Co.

Brig Florence May, Cochrane, Windsor, NS, for New York, 10 days, with plaster to C W Bertaux.

Brig Open Sea, Hatch, Bath for New York.

Schr Red Beach, Hines, Windsor, NS, for New York, 9 days, with plaster to C W Bertaux.

Schr Minnesota, Smith, Providence for New York.

Schr A J Dyer, Lathrop, Calais for New York, with lumber to order.

Schr Ida Herbert, Allen, New Bedford for New York.

Schr Sarah R Thomas, Arnold, Connecticut River for Philadelphia.

Schr Belle, Holmes, Plymouth for Baltimore.

Schr Addie Jordan, Davis, Kennebec River for New York.

Schr Dreadnaught, Saunders, New Haven for South Amboy.

Schr Geo P Trigg, Linnekin, Gloucester for New York, with fish to Woodruff & Simonson.

Schr Matanzas, Bragdon, Boston for Port Johnson.

Schr E M Wells, Kelsey, Cromwell for New York, with stone to Merriman & Madden.

Schr Entire, Kinnear, Providence for New York.

Schr Minerva, Jones, Providence for New York.

Schr North Star, Wentworth, George's Banks for New York, with fish to Haley & Co.

Schr Lillie Ernestine, Wells, New Haven for New York.

Schr Brandywine, Edgar, New Haven for Jersey City.

Schr A & E Baker, Murray, New Haven for New York.

Schr Allandale, Phinney, New Haven for New York.

Schr J H Burnett, Martin, New Bedford for New York.

Schr O P Hawley, Stiles, Brookhaven for New York.

Schr Adeline Hamblin, Ellis, Bangor for