

their exporting anything useful to another. Judging from the immense portion of their orbits which lie beyond our system, we are disposed to *imagine* that the central body of some other system is placed in the distant focus of each of their orbits, and that in this way all the different systems in the universe are, as it were, united into one by the intercommunication of comets. Were our planetary system, with its 700 comets, and probably as many thousands more, to be surveyed from other external systems, a mass of unresolvable nebulous matter, mixed with stars, would doubtless be described by powerful telescopes, and exhibit to us a picture analogous to the nebulous combinations by which astronomers have been so much perplexed.

The most common aspect of a comet *κομήη*, hair, is that of a faint round nebula, through which stars are visible. In advancing towards the sun the luminous matter becomes bright, and at last shoots forth a long train of light called its tail. After passing the sun the tail becomes shorter and shorter until it disappears, and when the comet has receded to a certain distance it, too, disappears, even to the most powerful telescopes. According to M. Arago, there are some comets whose luminosity is uniform, others which have a *nucleus* or condensed portion which is sometimes transparent, while there are other comets which are more brilliant than the planets, and whose nuclei, there is reason to believe, are opaque and solid. The comet which M. Gambard saw pass over the Sun's disc was obviously an opaque body. The origin and nature of the tails of comets have excited much speculation. Sometimes their tails are only a few degrees in length, and sometimes they stretch even from the horizon to the zenith. In some comets the tail is composed of streams of diverging light, of which six have been counted, extending from the nucleus nine millions of millions, and all of them bent in the same direction. These streams vary in number and length in the same comet, as was seen in the comet of 1825, when observed at Paramatta. Mr Dunlop assures us that the tail underwent not only continual but *periodic* changes, indicating "a rotation or irregular succession of the same appearances," performed in 19 hours and 36 minutes. The changes of figure were very sensible in a short time, "and made their appearance generally at the head of the comet, sometimes shooting out from one tail, and sometimes from both, but generally making their appearance first on the following side of the head."* In the splendid comet of 1811, which was visible for ten months in this country, the tail which displayed rapid coruscations, consisted of two diverging beams of slightly coloured light, inclined at an angle of about 18°, and a little bent outward. The length of the tail varied from about 96 to 130 millions of miles. The nucleus of the comet was a brilliant spot, estimated to be 50th miles in diameter, and it was separated from the inner surface of the surrounding disc by an interval of 36,000 miles. M. Chaldini observed in this comet "certain undulatory ebullitions rushing from the nucleus to the end of the tail, a distance of more than ten millions of miles, in two or three seconds of time." The comet of 1824 mocked the many theories of cometary tails, by exhibiting *two tails* diametrically opposite, the one on the Sun's side being smaller and fainter than the other.

CHRIST'S SECOND COMING

Will be sudden and striking; and yet the signs of it will be apparent to all that are looking for it. Yes, as a snare will it come upon the ungodly who dwell upon the earth, and are seeking their happiness below; but to God's living saints the signs of its coming will appear evident and plain. Then it is that, while all the tribes of the earth shall mourn, the people of God may, as they are bidden by our Lord himself, lift up their heads because their redemption draweth nigh. Awful then will be the reflections of worldly men who have their part and portion in this world. Let those who now spend Sabbaths in riot and drunkenness, in idleness, levity and listlessness, think of the consternation they will then be in; and let saints who are ready to fret under their trials learn to be patient, since the coming of the Lord will eternally compensate for all.

Christ's second coming is fixed and determined by God, though unknown by angels and men. Yes, he hath appointed a day,—the very day—in which he will judge the world in righteousness by that man—the God-man Christ Jesus—whom

he hath ordained. This momentous day is frequently referred to in Scripture. It is spoken of as the Day of the Lord,—the day of Christ's second coming,—the great day,—the time when the Lord shall come, and bring to light the hidden things of darkness, and make manifest the counsels of the heart. Yet, though fixed by God, it is to all men a hidden mystery; for of it knoweth no man; no, not the angels of heaven; neither the Son, as man; but the Father only. And all is in mercy to us, that we may watch, lest coming unawares, he find us sleeping. O to be ready and watching, so that we may, without surprise, go into the blessed marriage supper of the Lamb! Happy surely will be our lot, if thus it be found with us?

Christ's second coming will be splendid and glorious. He will come in his own glory, in the glory of his Father, and of his holy angels. His first appearance on earth was mean, but his second coming will be infinitely glorious. In his first coming he had sin, not indeed inherent sin, for he had no sin of his own; he was the holy, harmless, undefiled Lamb of God, otherwise he could not have taken away the sins of the world. For as the Paschal Lamb was without blemish, so was he without blemish and without spot. But though he had no sin of his own, yet, (Glory to a Three-one God for it,) he had all our iniquities laid upon him,—charged to his account; and that he might atone for them he behaved to subject himself to poverty and disgrace, to want and infamy, to sufferings both from God and man; and therefore was he emphatically styled a man of sorrows,—a man set apart to ignominy and suffering. But now at this his second coming, all the shame shall be forever wiped away, and his Cross appear, in the sight of all, an eternal glory to God, Father, Son, and Holy Spirit. Then shall heaven be emptied of the angels, and ten thousands of his saints attend the Lord of Glory to the throne of Judgment. O happy lot, to be then among the Righteous! O blessed day! O joyful time! Saints made completely happy forever, and angels eternally confirmed in that state of holiness and happiness already conferred upon them!

A THRILLING INCIDENT.

(From the True Wesleyan.)

A physician, not long since, was called upon to visit a person said to be in need of his professional aid. Following his guide, he was conducted up three flights of stairs into a poverty-stricken, sky-lighted apartment, where, on entering the room, he saw two young females sitting upon the bed. One of these was the patient. The bed itself exhibited marks of poverty, and every thing in the room corresponded. On approaching, he found the subject of his visit nearly in the agonies of death. Her companion was supporting her, and at the same time labouring to persuade her to take a bite of bread dipped in spirits. The pale emaciated figure refused, saying in a feeble voice that it would only prolong her misery which she hoped was nearly at an end. As the doctor approached her, she fixed on him her languid eyes, which as she gazed appeared to kindle with unnatural fires and she spake as follows:—"You have come too late, sir, I want none of your assistance—O that you could administer to a mind diseased, seized with the pangs of moral death! O that you could quench the fires of remorse that burn within, it would be more than to heal the body." Here she drew a convulsive sigh, and fell back upon the bed, from which she never rose until removed a corpse. Every effort was made to restore her but in vain; within two hours her spirit was gone.

In a small box by the side of her bed, were found some papers, showing that this wretched young woman was from a good family, and possessed more than an ordinary education. She had changed her name to conceal her life and wretched end from her parents, whom she pitied, and whose greatest fault had been, that they were too indulgent, and had placed too much confidence in the prudence of a favourite daughter.

There was one paper which contained directions concerning her funeral. Upon the back of this paper, were the following verses, and in the box was some money to pay for having them engraved upon her tomb-stone.

VERSES FOR MY TOMB, IF I SHALL HAVE ONE.

By a Penitent.

"The wretched victim of a quick decay"
Relieved from life on humble bed of clay,

* The reader will find in the *Edinburgh Journal of Science* for January, 1827, a plate by Mr Dunlop, containing seventeen drawings of these different states of the comet.