

virtually proved that it had the title even in the reign of Augustus.

Even after this Aurelius was not allowed to rest. From Rome, to which he had returned, he marched to Germany to carry on the war against the tribes which harassed the empire. There the alarming news reached him that Avidius Cassius, the brave and experienced commander of the Roman troops in Asia, had revolted and proclaimed himself emperor. But the rebellion did not last long. Cassius had only enjoyed his self-conferred honour for three months, when he was assassinated, and his head was brought to Marcus. With characteristic magnanimity, Marcus did not thank the assassins for what they had done; on the contrary, he begged the senate to pardon all the family of Cassius, and to allow his life to be the only one forfeited on account of the civil war. This was agreed to, and it must be considered as a proof of the wisdom of Aurelius's clemency, that he had little or no trouble in pacifying the provinces which had been the scene of rebellion. He treated them all with forbearance, and it is said that when he arrived in Syria, and the correspondence of Cassius was brought him, he burnt it without reading it. During this journey of pacification his wife Faustina, who had borne him eleven children, died. The gossiping historians of the time, particularly Dion Cassius and Capitolinus, charge Faustina with the most shameless infidelity to her husband, who is even blamed for not paying heed to her crimes. But none of these stories rest on evidence which can fairly be considered trustworthy; while, on the other hand, there can be no doubt whatever that Aurelius loved his wife tenderly, and trusted her implicitly while she lived, and mourned deeply for her loss. It would seem that Aurelius, after the death of Faustina and the pacification of Syria, proceeded, on his return to Italy, through Athens, and was initiated in the Eleusinian mysteries, the reason assigned for his doing so being, that it was his custom to conform to the established rites of any country in which he happened to find himself. Along with his son Commodus he entered Rome in 176, and obtained a triumph for victories in Germany. In 177 occurred that persecution of Christians, the share of Aurelius in which has caused great difference of opinion, and during which Attalus and others were put to death. Meanwhile the war on the German frontier continued, and the hostile tribes were defeated as on former occasions. In this campaign Aurelius led his own forces; and, probably on that account, he was attacked by some infectious disease, which ultimately cut him off, after a short illness, according to one account, in his camp at Sirmium (Mitrovitz) on the Save, in Lower Pannonia, and, according to another, at Vindobona (Vienna), on the 17th March 180 A.D., in the fifty-ninth year of his age. His ashes (according to some authorities, his body) were taken to Rome, and he was deified. Those who could afford the cost obtained his statue or bust, and, for a long time, statues of him held a place among the Penates of the Romans. Commodus, who was with his father when he died, erected to his memory the Antonine Column (now in the Piazza Colonna at Rome), round the shaft of which are sculptures in relief commemorating the miracle of the Thundering Legion and the various victories of Aurelius over the Quadi and the Marcomanni.

The one blemish in the life of Aurelius is his hostility to Christianity, which is the more remarkable that his morality comes nearer than any other heathen system to that of the New Testament. Attempts have been made to show that he was not responsible for the atrocities with which his reign is credited, but the evidence of Justin, of Athenagoras, of Apollinaris, and above all, of Melito, bishop of Sardis, and of the Church of Smyrna, is overwhelmingly

so the effect that not only were there severe persecutions of Christians, in which men like Polycarp and Justin perished, but that the foundation of these persecutions was certain rescripts or constitutions issued by Aurelius as supplementary to the milder decrees of his predecessors Hadrian and Antoninus Pius. In explanation, however, if not in extenuation, of the attitude of Aurelius towards Christianity, several circumstances should be taken into consideration. In the first place, it is evident that he knew little of the Christians, and absolutely nothing of Christian ethics. In his *Meditations* he makes only one reference (xi. 3) to the adherents of the new creed, and that of the most contemptuous character, showing that he confounded them all with certain fanatics of their number, whom even Clemens of Alexandria compares, on account of their thirst for martyrdom, to the Indian gymnosophists. How far this ignorance was culpable it is impossible at so remote a date to say. Further, it should be noted, in regard to the rescripts upon which the persecutions were founded, that, although they were in the name of the emperor, they may not have proceeded directly from him. There is no evidence that he was an active persecutor, except a passage in Orosius to the effect that there were persecutions of the Christians in Asia and Gallia "under the orders of Marcus;" and it should not be kept out of consideration that he was to some extent a constitutional monarch, and had to pay deference both to the *consulta* of the senate and the precedents of previous emperors. At the time there was a great popular outcry against the Christians on social and political, even more than on religious, grounds; and Aurelius may have been as much at the mercy of intriguers or fanatics when he gave his sanction to the butcheries of Christians in Asia Minor, as William III. was at the mercy of Stair and Breadalbane, the real authors of the massacre of Glencoe. Finally, it should be borne in mind that, in the reign of Aurelius, the Christians had assumed a much bolder attitude than they had hitherto done. Not only had they caused first interest and then alarm by the rapid increase of their numbers, but, not content with a bare toleration in the empire, they declared war against all heathen rites, and, at least indirectly, against the Government which permitted them to exist. In the eyes of Aurelius they were atheists and foes of that social order which he considered it the first of a citizen's duties to maintain, and it is quite possible that, although the most amiable of men and of rulers, he may have conceived it to be his duty to sanction measures for the extermination of such wretches. Still his action at the time must be considered, as John Stuart Mill puts it, as "one of the most tragical facts in all history."

The book which contains the philosophy of Aurelius is known by the title of his *Reflections*, or his *Meditations*, although that is not the name which he gave to it himself, and of the genuineness of the authorship no doubts are now entertained. It is believed that the emperor also wrote an autobiography, which has perished with other treasures of antiquity. The *Meditations* were written, it is evident, as occasion offered,—in the midst of public business, and even on the eve of battles on which the fate of the empire depended,—hence their fragmentary appearance, but hence also much of their practical value and even of their charm. It is believed by many critics that they were intended for the guidance in life of Aurelius's son, Commodus. If so, history records how lamentably they failed in accomplishing their immediate effect, for Commodus proved one of the greatest sensualists, buffoons, and tyrants that disgraced even the Roman purple. But they have been considered as one of the most precious of the legacies of antiquity,—as, in fact, the best of non-inspired reflections on practical morality. They have been recognised as among the most effectual stimuli to strugglers

in life, of whatever class and in whatever position, in the field of speculation as in that of action. The *Meditations* of Marcus Aurelius were, with Machiavelli's *Art of War*, the daily study of Captain John Smith, the real founder of the United States. They are placed by Mr Mill in his posthumous essay on the *Utility of Religion* as almost equal in ethical elevation to the Sermon on the Mount.

Aurelius early embraced, and throughout life adhered to, the Stoical philosophy, probably because he considered it as the sternest and most solid system to oppose to the corruption of his time. But, as Tenneman says, he imparted to it "a character of gentleness and benevolence, by making it subordinate to a love of mankind, allied to religion." In the *Meditations* it is difficult to discover anything like a systematic philosophy, which, indeed, means, as he used the word, tranquillity, or a serene habit of mind. From the manner, however, in which he seeks to distinguish between matter (*ἔλη*) and cause or reason (*αἰτία, λόγος*), and from the Carlylean earnestness with which he advises men to examine all the impressions on their minds (*φαντασίαι*), it may be inferred that he held the view of Anaxagoras—that God and matter exist independently, but that God governs matter. There can be no doubt that Aurelius believed in a deity, although Schultz is probably right in maintaining that all his theology amounts to this,—the soul of man is most intimately united to his body, and together they make one animal which we call man; and so the deity is most intimately united to the world or the material universe, and together they form one whole. We find in the *Meditations* no speculations on the absolute nature of the deity, and no clear expressions of opinion as to a future state. We may also observe here that, like Epictetus, he is by no means so decided on the subject of suicide as the older Stoics. Aurelius is, above all things, a practical moralist. The goal in life to be aimed at, according to him, is not happiness, but tranquillity, or equanimity. This condition of mind can be attained only by "living conformably to nature," that is to say, one's whole nature, and as a means to that, man must cultivate the four chief virtues, each of which has its distinct sphere—wisdom, or the knowledge of good and evil; justice, or the giving to every man his due; fortitude, or the enduring of labour and pain; and temperance, or moderation in all things. It is no "fugitive and cloistered virtue" that Aurelius seeks to encourage; on the contrary, man must lead the "life of the social animal," must "live as on a mountain;" and "he is an abscess on the universe who withdraws and separates himself from the reason of our common nature through being displeased with the things which happen." While the prime principle in man is the social, "the next in order is not to yield to the persuasions of the body, when they are not conformable to the rational principle which must govern." This "divinity within a man," this "legislating faculty" (*τὸ ἡγεμονικόν*) which, looked at from one point of view, is conscience, and from another is reason, must be implicitly obeyed. He who thus obeys it will attain tranquillity of mind; nothing can irritate him, for everything is according to nature, and death itself "is such as generation is, a mystery of nature, a composition out of the same elements, and a decomposition into the same, and altogether not a thing of which any man should be ashamed, for it is not contrary to the nature of a reasonable animal, and not contrary to the reason of our constitution."

The morality of Marcus Aurelius cannot be said to have been new when it was given to the world, far less can it be said to be systematic. Compared, indeed, with elaborate treatises on ethics, the *Meditations* of Marcus Aurelius are as tonic medicine to succulent food. The

charm of his morality lies in its exquisite accent and its infinite tenderness. Where can the connoisseur in morals find anything finer than such sentences as this?—"The pride which is proud of its want of pride is the most intolerable of all;" or where can a more delicate rebuke to the Pharisaism which lurks in the breast of every man be obtained than this?—"One man, when he has done a service to another, is ready to set it down to his account as a favour conferred. Another is not ready to do this, but still, in his own mind, he thinks of the man as his debtor, and he knows what he has done. A third in a manner does not even know what he has done, but he is like a vine which has produced grapes, and seeks for nothing more after it has once produced its proper fruit. So a man when he has done a good act, does not call out for others to come and see, but he goes on to another act as a vine goes on to produce again the grapes in season." But above all, what gives the sentences of Marcus Aurelius their enduring value and fascination, what renders them superior to the utterances of other moralists of the same school, such as Epictetus and Seneca, is that they are the gospel of his life. His practice was in accordance with his precepts, or rather his precepts are simply the records of his practice. To the saintliness of the cloister he added the wisdom of the man of the world; constant in misfortune, not elated by prosperity, never "carrying things to the sweating point;" preserving, in a time of universal corruption, unreality, and self-indulgence, a nature sweet, pure, self-denying, unaffected, Marcus Aurelius has given to the world one of the finest examples of the possibilities of humanity.

The *Meditations* of Marcus Aurelius have been translated into English, German, French, Spanish, and Italian. The two chief English translations are those of Jeremy Collier (1702) and of George Long; the last may be considered final. The text most commonly used is the Greek one edited by J. M. Schultz (republished by Tauchnitz in 1821). Many books have been written on the life and times of Aurelius, and the essays on his *Meditations* are innumerable. One of the best estimates of him is contained in Mr F. W. Farrar's *Seekers after God*, 1868. A scholarly work issued in 1874 by M. Gaston Boissin, entitled *La Religion Romaine d'Auguste aux Antonines*, gives, perhaps, the most interesting existing account of the state of society under the Antonines.

AUREOLA, AUREOLE, the radiance or luminous cloud which, in paintings of sacred personages, is represented as surrounding the whole figure. In the earliest periods of Christian art this splendour was confined to the figures of the persons of the Godhead, but it was afterwards extended to the Virgin Mary and to several of the saints. The aureola, when enveloping the whole body, is generally oval or elliptical in form, but is occasionally circular or quatrefoil. When it is merely a luminous disk round the head, it is called specifically a *nimbus*, while the combination of nimbus and aureole is called a *glory*. The strict distinction between nimbus and aureole is not commonly maintained, and the latter term is most frequently used to denote the radiance round the heads of saints, angels, or persons of the Godhead.

AURICH, a town of Prussia, in the province of Hanover, situated on the Treckief canal. It is regularly built; possesses a castle, which was formerly the residence of the prince of East Friesland, a lyceum, and four libraries; and carries on the manufacture of leather, paper, pottery, and tobacco. The famous meeting-place of the East Frieslanders, *Upstaalsboom*, is in the neighbourhood. Population, 4264.

AURIFABER (the Latinised form of the name GOLD-SCHMIDT), JOANNES, a Lutheran divine, celebrated as the

friend of Luther and as one of the editors of his works, was born in 1519 in the county of Mansfeldt, or, more probably, in the town of Weimar. After completing his education at the university of Wittenberg, where he heard the lectures of Luther, he became tutor to Count Mansfeldt, and in the war of 1544-5 accompanied the army as field-preacher. For some months afterwards he resided with Luther as his *famulus* or private secretary, and was present at his death in 1546. In the following year he spent six months in prison along with John Frederick, elector of Saxony, who had been captured by the emperor, Charles V. He held for some years the office of court-preacher at Weimar, but, owing to theological disputes, was compelled to resign this office in 1561. In 1566 he was appointed to the Lutheran church at Erfurt, which post he held, though not without serious differences with his fellow-clergymen, till his death in 1575. Besides taking a share in the first collected or Jena edition of Luther's works, Aurifaber sought out and published at Eisleben in 1564-5 several writings not included in that edition. He also published Luther's *Letters* (1556, 1565), and *Table Talk* (1566).

AURIFABER, JOANNES, a Lutheran divine, born at Breslau in 1517. He was educated at Wittenberg, and was there specially attracted to Melancthon, with whom he ever afterwards remained on terms of close friendship. After graduating in 1538 he spent twelve years as *docent* at the university, and having then received his doctorate of divinity, was appointed professor of divinity and pastor of the church of St Nicholas at Rostock. He distinguished himself by his prudence and conciliatory disposition, took a leading part in the composition of the regulations for the Mecklenburg Church, and was successful in allay-

## A U R O R A P O L A R I S

AURORA POLARIS, AURORA BOREALIS and AUSTRALIS, POLAR LIGHT, NORTHERN LIGHTS, or STREAMERS, an electrical meteor, appearing most frequently in high latitudes, in the form of luminous clouds, arches, and rays, of which the latter sometimes meet at a point near the zenith, and form what is called a *boreal crown*. The arches are sometimes single; sometimes several concentric ones are seen, and they are usually nearly stationary, or move slowly southward. They cross the magnetic meridian at right angles, and, therefore, in England, have their centres nearly N.N.W. The rays rise perpendicularly from the arches, but are sometimes seen detached, or when the arch is below the horizon. They are parallel to the dipping needle, or, in other words, to the curves of magnetic force; and the boreal crown, at which they appear to meet, is merely an effect of perspective. This point is in England about 70° in altitude, and nearly S.S.E. of the zenith. The rays are seldom stationary, but appear and disappear suddenly, shooting with great velocity up to the zenith, and moving slowly eastward or westward, but most commonly the latter. They sometimes cover the whole sky, and frequently have a strong tremulous motion from end to end. This tremulous motion is sometimes seen also in the arches when near the zenith; and Benjamin V. Marsh mentions a case in which the matter of the arch had the appearance of a rapid torrent flowing from east to west. A rare form of aurora is that in which the rays appear to hang from the sky like fringes or the folds of a mantle. The ordinary colour of the aurora is a pale greenish-yellow, but crimson, violet, and steel-colour are not uncommon. Crimson auroras have often been imagined by the superstitious to be omens of war, pestilence, and famine; and lively imaginations have seen in their motions—

ing some religious disputes in the town of Lübeck. The Grand-duke Albert of Prussia, who was very desirous of healing the differences in the Prussian Church caused by the discussion of Osiander's doctrines, was attracted by Aurifaber, invited him to Königsberg in 1553, and in the following year appointed him to the professorship of divinity in that university, and to the presidency of the Samland diocese. Aurifaber, however, found it impossible to conciliate all parties, and in 1565 returned to Breslau, where, for the three remaining years of his life, he discharged the joint offices of pastor in the church of St Elizabeth and director of the Lutheran Church and schools. He died 19th October 1568.

AURILLAC, the capital of the department of Cantal, France, situated on the right bank of the Jourdanne, which is here crossed by a handsome bridge. It contains tribunals of primary instance and commerce, a communal college, societies of agriculture, arts, and commerce, a public library, and a museum. Most of the town is of comparatively modern construction, its more ancient buildings having suffered severely in the religious wars of the 16th century. Of highest claims to antiquity are portions of the castle of St Etienne, the church of St Géraud, and a Benedictine abbey, which is regarded by many as the original nucleus round which Aurillac gathered. There is a statue of Sylvester II., who was a native of the town, and was educated in the abbey, which soon afterwards became one of the most famous schools of France. The manufactures consist of tapestry, lace, cutlery, paper, leather, &c., and a considerable number of horses are bred. Population in 1872, 11,098.

AURORA, the Roman personification of the dawn of day, corresponding to the Greek goddess Eos (*q.v.*).

"Fierce fiery warriors fight upon the clouds  
In ranks, and squadrons, and right form of war."

They were called by the ancients *chasmata*, *bolides*, and *trabes*, according to their forms and colours. In Shetland, where they are very frequent, and in the north of Scotland, they are known as the "*merry dancers*" (perhaps the ancient *capree saltantes*); while, from a curious passage in Sirr's *Ceylon and the Cingalese*, vol. ii. p. 117, it seems that the aurora, or something like it, is occasionally visible in Ceylon, and that the natives call it the *Buddha lights*. Mr Jansen says, however, that the great aurora of 4th February 1872, which was seen at Bombay, was not visible in Ceylon. In many parts of Ireland a scarlet aurora is supposed to be a shower of blood, and under this name is not unfrequently mentioned in the old annals, always in connection with some battle or the murder of a great chief. The earliest mentioned was in 688, in the *Annals of Cloon-mac-noise*, after a battle between Leinster and Munster, in which Foylcher O'Moyloyer was slain. It was observed at Edessa in 502, and in Syria in 1097, 1098, and 1117.

The only thing resembling a distinct history of this phenomenon is that which has been given by Dr Halley, in the *Philosophical Transactions*, No. 347. The first account he gives, taken from a book entitled *A Description of Meteors*, by W. F., D.D., reprinted at London in 1654, describes the appearance of what is called by him *burning spears*, which were seen at London on the 30th January 1560. The next appearance, according to the testimony of Stow, was on the 7th October 1564. In 1574 also, according to Camden and Stow, an aurora borealis was observed two nights successively, viz., on the 14th and 15th of November, having much the same appearances as that described by Dr Halley in 1716. Again, an aurora

was twice seen in Brabant, in the year 1575, viz., on the 13th of February and 28th of September. Both appearances were described by Cornelius Gemm, professor of medicine at Louvain, who compares them to spears, fortified cities, and armies fighting in the air. Michael Mæstlin, tutor to Kepler, states that at Backnang in Würtemberg these phenomena, which he styles *chasmata*, were seen by himself no less than seven times in 1580. In 1581 they again appeared in great splendour in April and September, and in a less degree in some other months of the same year. In September 1621, a similar phenomenon was observed all over France, and described by Cassendi, who gave it the name of *aurora borealis*; yet neither this, nor any similar appearance posterior to 1574, is described by English writers till the year 1707. From 1621 to 1707, indeed, there is no mention made of an aurora borealis having been seen at all; and, considering the number of astronomers who during that period were continually scanning the heavens, it might almost be supposed that nothing of the kind really made its appearance until after an interval of eighty-six years. A small one was seen in November 1707; and during that and the following year the same appearances were repeated five times. The next on record is that mentioned by Dr Halley in March 1716, which from its brilliancy attracted universal attention, and was considered by the common people as marking the introduction of a foreign race of princes. Since that time these meteors have been much more frequent, and most of our readers must have seen the brilliant displays within the last few years which have been visible over the whole of Europe.

One singular phenomenon which seems to be connected with the aurora is that of a dark bank of cloud below the arches, and usually just above the northern horizon. Although this appears decidedly darker than the uncovered portion of the sky, it is of so thin a character that stars can be seen through it, as well as through the auroral arches and rays, with but little diminution of brightness. It is, however, quite possible that this cloud is only the somewhat misty open sky near the horizon, which appears darker by contrast with the bright arch above it.

It has been repeatedly affirmed that cracking, hissing, or whizzing sounds have been heard proceeding from the polar lights, and the natives of high latitudes are almost unanimous in alleging that this is sometimes the case. Scoresby, Richardson, Franklin, Parry, Hood, and later observers seem to have listened in vain for such noises, and it seems that in the intense cold of the Arctic night the contraction of the ice, or its cleavage under the pressure of approaching tempests, produces sounds exactly such as are described. Still, mere negative evidence must be received with caution, and it is very possible that in high latitudes such sounds may occasionally be heard, since the electric discharge seems to originate near the poles. The aurora, too, seems to vary greatly in height, and in lower latitudes is usually at such an altitude that audible sounds from it are quite impossible. Musschenbroeck says that the Greenland fishers in his time assured him that they had frequently heard noises proceeding from the aurora borealis, and his testimony is confirmed by that of many others. There is no *a priori* improbability of such sounds being occasionally heard, since a somewhat similar phenomenon accompanies the brush discharge of the electric machine, to which the aurora bears considerable resemblance.

Numerous observers (*Nature*, iv. 27, 47) have attested the occasional visibility of aurora by daylight. In the *Transactions of the Royal Irish Academy*, 1788, Dr H. Ussher notices that aurora makes the stars "flutter" very much in the telescope, and states that, having noticed this effect strongly one day at 11 A.M., he examined the sky, and

saw an auroral corona with rays to the horizon. J. Glaisher, Franklin, and others, have also observed the phenomenon. It is scarcely possible that a light so faint as not even to obscure the stars should be visible in sunlight, and such facts would seem to suggest that the auroral light is developed in cloud or mist of some sort, which may become visible by reflected light, as well as by its own. Franklin says, "Upon one occasion the aurora was seen immediately after sunset, while bright daylight was still remaining. A circumstance to which I attach some importance must not be omitted. Clouds have sometimes been observed during the day to assume the forms of aurora, and I am inclined to connect with these clouds the deviation of the needle, which was occasionally remarked at such times." The writer has seen aurora which could not be distinguished from clouds, till the further development of the display made their real nature evident. Dr Richardson thinks he has observed a polarity in the masses of cloud belonging to a certain kind of cirro-stratus approaching to cirrus, by which their long diameters, having all the same direction, were made to cross the magnetic meridian nearly at right angles. But the apparent convergence of such masses of cloud towards the opposite points of the horizon, which have been so frequently noticed by meteorologists, is an optical deception, produced when they are situated in a plane parallel to that on which the observer stands. These circumstances, says Dr Richardson, are here noticed, because if it shall hereafter be proved that the aurora depends upon the existence of certain clouds, its apparent polarity may, perhaps, with more propriety, be ascribed to the clouds themselves which emit the light; or, in other words, the clouds may assume their peculiar arrangement through the operation of one cause (magnetism, for example), while the emission of light may be produced by another, namely, a change in their internal constitution, perhaps connected with a motion of the electrical fluid. D. Low (*Nat.*, iv. 121) states that he has witnessed as complete a display of auroral motions in the cirrus cloud as he ever beheld in a midnight sky. He thinks that all clouds are subject to magnetic or diamagnetic polarisation, and states that when the lines converge towards the magnetic pole, fine weather follows; when they are at right angles to this position, wet and stormy. The aurora appears in these latitudes usually to occur at a height much greater than that of ordinary clouds. Dr Richardson's observations (Franklin and Richardson's *Journey to the Shores of the Polar Sea*) seem to show, however, that, in the Arctic regions, the aurora is occasionally seated in a region of the atmosphere below a kind of cloud which is known to possess no great altitude, namely, that modification of cirro-stratus which, descending low in the atmosphere, produces a hazy sheet of cloud over head, or a fogbank in the horizon. Indeed, Dr Richardson is inclined to infer that the aurora borealis is constantly accompanied by, or immediately precedes, the formation of one or other of the forms of cirro-stratus. On the 13th of November and 18th December 1826, at Fort Enterprise, its connection with a cloud intermediate between cirrus and cirro-stratus is mentioned; but the most vivid coruscations of the aurora were observed when there were only a few thin attenuated shoots of cirro-stratus floating in the air, or when that cloud was so rare that its existence was only known by the production of a halo round the moon. The natives of the Arctic regions of North America pretend to foretell wind by the rapidity of the motions of the aurora; and they say that when it spreads over the sky in a uniform sheet of light, it is followed by fine weather, and that the changes thus indicated are more or less speedy, according as the appearance of the meteor is early or late in the evening,—an opinion not improbable, when it is recollected