

3. The motion of the shadow of the globe of Saturn, in a direction contrary to the motion of the rings, which shadow will occupy a space of many thousand miles upon the rings, will form another variety of scenery in the firmament.

4. If the two rings revolve around the planet in different periods of time, the appearances in the celestial vault will be still more diversified; then one scene will be seen rising on the upper, and another and a different scene rising on the lower ring; and through the opening between the rings, the stars, the planets, or one or two of the satellites, may sometimes appear.

Near the polar regions of the planet, only a comparatively small portion of the rings will appear above the horizon, dividing the celestial hemisphere into two unequal parts, and presenting the same general appearances now described, but upon a smaller scale. Toward the polar points, the rings, will, in all probability, be quite invisible. During the space of fourteen years and nine months, which is half the year of the planet, the sun shines on the one side of these rings without intermission, and during the same period he shines on the other side. During nearly fifteen years, therefore, the inhabitants on one side of the equator will be enlightened by the sun in the day time, and the rings by night, while those on the other hemisphere, who live under the dark sides of the rings, suffer a solar eclipse of fifteen years' continuance, during which they never see the sun. At the time when the sun ceases to shine on one side of the rings, and is about to shine on the other, the rings will be invisible, for a few days or weeks, to all the inhabitants of Saturn.

At first view, we might be apt to suppose that it must be a gloomy situation for those who live under the shadow of the rings, during so long a period as fifteen years. But, we are not acquainted with all the circumstances of their situation, or the numerous beneficent contrivances which may tend to cheer them during this period; and therefore are not warranted to conclude that such a situation is physically uncomfortable. We know that they enjoy the light of their moons without almost any interruption. Sometimes two, sometimes four, and sometimes all their seven moons, are shining in their hemisphere in one bright assemblage. Besides, during this period is the principal opportunity they enjoy of contemplating the starry firmament, and surveying the more distant regions of the universe, in which they may enjoy a pleasure equal, if not superior, to what is felt amidst the splendor of the solar rays; and it is not improbable, that multitudes may resort to these darker regions, for the purpose of making celestial observations. For the bright shining of the rings during the continuance of night will, in all probability, prevent the numerous objects in the starry heavens from being distinguished. The very circumstance, then, which might at first view convey to our minds images of gloom and horror, may be parts of a system in which are displayed the most striking evidences of beneficent contrivance and design.

It has often been asked, as a mysterious question, 'What is the use of the rings with which Saturn is environed?' This is a question which I conceive, there is no great difficulty in answering. The following considerations will go a great way in determining this question:

1. They are intended to produce all the varieties of celestial and terrestrial scenery which I have described above, and doubtless other varieties, with which we are unacquainted; and this circumstance of itself, although we could devise no other reason, might be sufficient to warrant the Creator in deviating from his general arrangements in respect to the other planets. For variety is one characteristic of his plans and operations, both in respect to the objects on our globe, and to those which exist throughout the planetary system; and it is accordant with those desires for novelty and variety which are implanted in the minds of intelligent beings.

2. They are intended to give a display of the grandeur of the Divine Being, and of the effects of his Omnipotence. They are also intended to evince his inscrutable wisdom and intelligence, in the nice adjustment of their motions and positions, so as to secure their stability and permanency in their revolutions along with the planet around the sun.

3. They are doubtless intended to teach us what varied kinds of sublimity and beauty the Deity has introduced, or may yet introduce, into various regions throughout the universe. We are acquainted with only a few particulars respecting one planetary system. But we have every reason to conclude, that many millions of similar or analogous systems exist throughout the unlimited regions of space. In some of these systems, the arrangements connected with the worlds which compose them, may be as different from those of our globe, and some of the other planets, as the arrangements and apparatus connected with Saturn are different from those of the planets Vesta or Mars. Around some of these worlds there may be thrown not only two concentric rings, but rings standing at right angles to each other, and enclosing and revolving around each other. Yea, for aught we know, there may be an indefinite number of rings around some worlds, and variously inclined to each other, so that the planet may appear like a terrestrial globe, suspended in the middle of an armillary sphere; and all these rings may be revolving within and around each other, in various directions, and on different periods of time, so

as to produce a variety and sublimity of aspect, of which we can form no adequate conception. There is nothing irrational or extravagant in these suppositions: for had we never discovered the rings of Saturn, we could have formed no conception of such an appendage being thrown around any world, and it would have been considered in the highest degree improbable and romantic, had any one broached the idea. We are therefore led to conclude, from the characteristic of variety impressed on the universe, that Saturn is not the only planet in creation that is surrounded with such an apparatus, and that the number and position of its rings were not the only models according to which the planetary arrangements in other systems may be constructed.

4. Beside the considerations now stated, the chief use, I presume, for which these rings were created, was—that they might serve as a spacious abode for myriads of intelligent creatures. If we admit that the globe of Saturn was formed for the reception of rational beings, we have the same reason to believe that the rings were formed for a similar purpose. It is not at all likely that a surface of 29,000,000,000 of square miles, capable of containing ten thousand times the population of our globe, would be left destitute of inhabitants, when there is not a puddle, or marsh, or drop of water, on our globe, but teems with living beings. These rings are as capable of supporting sensitive and intelligent beings as any of the globes which compose the solar system. They are solid bodies; they have an attractive power; they are endowed with motion; and from their surface the most grand and magnificent displays may be beheld of celestial scenery. From all the circumstances which have been stated above, it is evident that the numerous objects connected with the rings and with the globe of Saturn, were not intended merely to illuminate barren sands and hideous deserts, but to afford a comfortable and magnificent habitation for thousands of millions of rational inhabitants, who employ their faculties in the contemplation of the wonders which surround them, and give to their Creator the glory which is due to his name.

A variety of other scenes and circumstances might have been detailed, in reference to the rings of Saturn; but this paper has already been protracted to an inconvenient length; and without figures and machinery, it is impossible to convey clear and definite ideas on this subject.

T. D.

Selected for the Pearl.

ELOQUENT EXTRACTS.

THE POWER OF KINDNESS.—We hear much of the power of knowledge and of the power of truth. Here is an eloquent extract from the pen of a Professor of Moral and Intellectual philosophy on the power of benevolence:—"Men may rely upon it, that a course of justice, tempered with unfeigned benevolence, will always be attended with the most favorable results. Is it not the mercy of God that leadeth to repentance? And if God's mercy, God's goodness, can thus influence and lead men to pursue a right course, why may not mercy and goodness in men have a similar effect? The fact is, the power of beneficence has never been fully estimated, and never been fully put to the test. When this is done, (and society will never rise upward to the mark of its destination, until it is done,) it will be seen, that we are not flighty and chimerical, nor even unphilosophical in our views of the safety of the doctrine of non-resistance. Mental philosophers have told us of the power of the resentful passions; not only how they sometimes prompt to injury, but how they have power to restrain others from doing injury. Political economists have told us of the power of bars and gates and prisons, in checking the tendencies to the perpetration of crime. But who, on philosophical principles, has investigated the power of beneficence and forgiveness? Beyond all question, it is the unalterable constitution of nature, that there is efficacy, divine, unspeakable efficacy in love. The exhibition of kindness has the power to bring even the irrational animals into subjection. Show kindness to a dog, and he will remember it; he will be grateful; he will infallibly return love for love. Show kindness to a lion, and you can lead him by the mane; you can thrust your hand into his mouth; you can melt the untamed ferocity of his heart into an affection stronger than death. In all of God's vast unbounded creation, there is not a living and sentient being from the least to the highest, not one, not even the outcast and degraded serpent, that is insensible to acts of kindness. If love, such as our blessed Saviour manifested, could be introduced into the world and exert its appropriate dominion, it would restore a state of things far more cheering, far brighter than the fabulous age of gold; it would annihilate every sting; it would pluck out every poisonous tooth; it would hush every discordant voice. Even the inanimate creation is not insensible to this divine influence. The bud and flower and fruit put forth most abundantly and beautifully, where the hand of kindness is extended for their culture. And if this blessed influence should extend itself over the earth, a moral garden of Eden would exist in every land; instead of the thorn and the brier, would spring up the fir-tree and the myrtle; the desert would blossom; and the solitary place be made glad."

THE COUNTEenance IN DEATH.—"Alas! how few of Nature's faces there are to gladden us with their beauty! The

cares, and sorrows, and hungerings of the world change them as they change hearts, and it is only when those passions sleep, and have lost their hold for ever, that the troubled clouds pass over, and leave heaven's surface clear. It is a common thing for the countenances of the dead, even in that fixed and rigid state, to subside into the long-forgotten expression of sleeping infancy, and settle into the very look of early life; so calm, so peaceful do they grow again, that those who knew them in their happy childhood kneel by the coffin's side in awe, and see the angel even upon earth."—Boz.

MOUNTAIN SCENERY.—"Of all the sights that nature offers to the eye and mind of man, mountains have always stirred my strongest feelings. I have seen the ocean when it was turned up from the bottom by tempest, and noon was like night with the conflict of the billows and the storm that tore and scattered them in mist and foam across the sky. I have seen the desert rise around me, and calmly, in the midst of thousands uttering cries of horror and paralyzed by fear, have contemplated the sandy pillars coming like the advance of some gigantic city of conflagration flying across the wilderness, every column glowing with intense fire, and every blast with death; the sky vaulted with gloom, the earth a furnace. But with me, the mountain—in tempest or in calm, the throne of the thunder, or with the evening sun painting its dells and declivities in colors dipt in heaven—has been the source of the most absorbing sensations;—there stands magnitude giving the instant impression of a power above man—grandeur that defies decay—antiquity that tells of ages unnumbered—beauty that the touch of time makes only more beautiful—use exhaustless for the service of man—strength imperishable as the globe: the monument of eternity,—the truest earthly emblem of that everliving, unchangeable, irresistible Majesty, by whom and for whom all things were made!"—Rev. G. Croly.

LOVELINESS OF MORNING.—"The beautiful glow of a bright clear morning!—In what part of the world are the mornings so lovely as in the Mediterranean, when the sun climbs above the verge of the horizon, and gilds the fleecy clouds—white, edged with gold,—as they sail through the azure vault of heaven? And then to see the vast cities, which fancy pictures as rising from the ocean—tower, dome and minaret, gorgeous palaces, glowing in the full effulgence of glory, with their pavilion curtains of purple, and crimson, and gold; the dark-blue waters doing homage at their feet. Oh! there is no place like the Mediterranean for witnessing a sunrise. The poet has said,

"Morning is beautiful everywhere."

But I have witnessed the first beams of the glorious orb as it seemed to emerge from the Atlantic wave, tinging the ocean and the heavens with their glowing hues; I have seen his red and hazy light, lifting heavily from the waters of the Southern Sea, after tracing his course through the night by the rays that spread themselves above the horizon; I have seen his early radiance resting upon the blue tops of the Andes; I have beheld the glistening reflection of his dazzling brilliancy from the icebergs of the North: but I can, from tried experience, declare that nothing surpasses the spectacle which is exhibited in these seas when "he cometh forth as a bridegroom from his chamber, and rejoiceth as a strong man to run a race."—Bentley's Miscellany.

THE SEA.—"The sea, even when calm and shining, strikes me as too grand, too stern, too real, to be connected with any thing that is pretty. We know almost as little of the depths of the ocean, as we do of the depths of eternity—of which it is a grand and awful emblem. It is singular, because the Jews could have only a limited acquaintance with it, that some of the scriptural expressions concerning the sea, have a truth, force and majesty alone worthy of the object. An expression in Jeremiah, is wonderfully precise;—"though the waves thereof toss themselves,"—thus describing that separate and individual motion of each billow, which they have from the greatest to the least. The continuous rolling is the result of all this individual tossing, and so independent are the movements, that one might fancy every particular wave to have a particular will. The heaving is of the mass beneath, and comes in voluminous rolls, as of hills in motion; on the surface of these are the waves, that, far as the eye can reach, take a sharp, angular, spiral form, till the whole resembles an army of spear-heads in motion. The phrase used in the prophet Jonah, "The sea wrought and was very tempestuous," may seem naked to those not on the element, but to any in the condition of Jonah's shipmates, there will be a power surpassing hyperbole, in the graphic simplicity of the expression, "the sea wrought." In the forty-sixth, or as it is often called, in Luther's Psalm, there is a beautiful touch concerning the ocean, which never struck me when on land. After declaring that "We will not be moved, though the waters roar and be troubled, though the mountains be carried into the midst of the sea; though the mountains shake with the swelling thereof; and though the earth be removed,"—the writer suddenly takes comfort from a thought couched in the form of a simile, which has a beautiful connexion with the preceding description—"There is a river, the streams whereof shall make glad the city of our God." He must have been tossed, stunned, wearied, if not endangered on the deep, before he could have imagined this exquisite transi-