

## THE CHRISTIAN PHILOSOPHER.

NO. VI.

## ON THE CAUSE OF THE CELESTIAL MOTIONS.

According to the established laws of nature, bodies will remain in a state of rest till moved by some external cause; and when once put in motion, will continue to move with a uniform velocity until some obstacle oppose their progress. If when a body is projected in a straight line, it be acted upon by another force, drawing it toward a centre (and hence called the centripetal force) it will describe a curve, which will be either a circle or an ellipsis, according to the proportion between the projectile and the centripetal force.

A body revolving in an orbit, endeavours to fly off from the centre [this is called the centrifugal force;] and the greater its distance, the greater will be the force. Its velocity will be increased in proportion as it is nearer the centre. Thus, if a ball fastened to a cord be whirled round, and the cord suddenly let go, the ball will fly off; but if the string be drawn up so as to bring the ball nearer the centre, it will revolve more rapidly.

Two bodies connected together, revolve round the common centre of gravity. If two balls of equal or unequal size be connected by a wire, there is a certain point in the wire where they will balance each other: this point is the centre of gravity, round which they will revolve, if put in motion. It is on these principles that the motion of the heavenly bodies is accounted for. A principle of attraction between the different bodies that compose it, pervades the whole system, varying according to the magnitude and nearness of the attracting body.

All the planets attract each other, and are all attracted by the sun, to which they would all tend, were it not for the centrifugal force generated by their motions in their orbits, which exactly balances their tendency to the centre, and thus preserves them in their places. Were this force greater, they would fly off into space, like the ivory ball when the cord is let go: were it less, they would rush toward the sun. All the planets, as well as the sun, must revolve round the common centre of gravity; but because of the sun's magnitude, the centre of our system is that luminary.

Hence we see the reason why those planets which are nearest the sun move with the greatest rapidity, because they are nearer the centre of gravity. From the same cause it is, that as the planets move in an ellipsis, they increase in velocity as they approach the sun, and move slower as they recede from it. The same principles that regulate the motions of the primary planets round the sun, govern the secondaries in their revolutions round their respective primaries.

It is impossible to say what is the cause of that attraction which thus holds the planets in their places; the laws which regulate it are known and understood: further than this, the researches of NEWTON could not go; he could only say, that He who created the planets, and gave them their motion, impressed upon them this tendency towards the centre round which they revolve.

If there be in the works of nature, that which baffles the greatest industry, and overwhelms the largest minds, need we wonder that in the works of grace and the operations of the Spirit of God, we should perceive mysteries not to be unraveled? We see the outward fruits that are brought forth in the life and conversation of the regenerate; and we know, from the Scriptures, that it is the Holy Ghost "who worketh in them both to will and to do;" but how he works we know not. The symptoms of the spiritual life are manifest, but its springs are hidden. "The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell, whence it cometh, and whither it goeth: so is every one that is born of the Spirit."

We may justly admire the wisdom and power of God in causing two opposite principles, like those of the centripetal and centrifugal forces, so to operate as to effect his purpose and preserve the order of nature. The same wisdom is displayed in bringing good out of evil, and in causing the opposite passions of men to counteract each other. How many men are there who would be monsters of avarice, cruelty, or lust, if pride did not interfere and lead them to seek the good opinion of their fellow-creatures, which they are conscious they should forfeit by giving way to propensities that all would condemn?

And even the oppositions of men to the interests of Christ, and all the persecutions and trials the Christian meets with, are over-ruled to promote the very cause they are meant to injure. Thus the persecution of Daniel, the three Hebrew Children, the first Christians, only served to advance the glory of God, the interests of true piety and the cause of the Redeemer.

## MISSIONARY REGISTER.

## GHAUT MURDERS.

THE exposure of the sick on the banks of the Ganges has been termed Ghaut Murder. A Ghaut is a flight of steps to a river, and at those places the acts of cruelty to the sick are generally perpetrated. The origin of this practice is probably to be traced to the absurd notion that the River Ganges is a goddess, and that to die in sight of it is beneficial. Hence also has arisen that idolatrous worship which has been paid to this river.

The Hindu character in many essential points, is so defective, and so much under the influence of deep-rooted prejudices and barbarous customs, that the greatest crimes are committed without remorse, and often under the sanction of their religious teachers. The aged Hindu parent is considered an incumbrance, and an unnecessary expense to the family, and is removed to the banks of the sacred Ganges. He is taken to the margin of the river on a bed, and a Brahman attends, to perform the religious ceremonies.—There can be no doubt that many who might recover are thus consigned to a premature death. The damp borders of the stream, with a burning sun, however favourable the season may be, rarely fail to put a speedy termination to the sick person's sufferings; but it often happens that the attendants become tired of the delay, and, perhaps with the intention of finishing his pain, place the bed at low water mark, if the spot be within flow of the tide, or smear the dying man with the slime of the holy waters and fill his mouth with mud. When a person has been taken to the side of the Ganges, or other substituted waters, under the supposition that he is dying, he is, in the eye of the Hindu law, dead;