

ceeded, in simple scriptural language, to prove that sinners were not required to do any thing to save themselves; but that Jesus Christ came into the world to procure salvation for all that believed on him, and now offered it to all as his free gift, without money and without price.

Every word she uttered sank deep into the heart of the eager and earnest listener, who seemed lost in astonishment and admiration at the thought of a free salvation as the gift of God. Suddenly she started from her seat, and, hurrying to the fire, threw her rosary into the flames, "It is finished," she cried, "my sins are pardoned, and Jesus has redeemed me from the curse of the law; and now I will go my way; but not to proceed to Our Lady of the Hermitage; no; but to go home, and tell my neighbours, that Jesus and Jesus alone, has saved the old sinner from her sins!"

The lady now knelt down with this aged young convert, and thanked God with her for this new evidence of his saving power. She then presented the old woman with a New Testament as a parting-gift, which in the exuberance of her joy, she repeatedly kissed, and then, like the Ethiopian nobleman, went on her way rejoicing that the aim and object of all weary and fruitless pilgrimages had at length been obtained.

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ILLUSTRATIONS OF ASTRONOMY,

PHYSICAL CONSTITUTION AND APPEARANCE OF THE SUN AND PLANETS.

To measure the celestial bodies is almost as great and difficult a task as to measure their distances from each other. The ingenuity and skill, with which man has been endowed by his Creator, have, however, enabled him

to accomplish the one with as much accuracy and precision as he has approximated to the other.

Physical Constitution of the Sun.

—Concerning the physical nature of sun, very little is known. As before the said, it appears, when seen through a telescope, like a globe of fire, in a state of violent commotion or ebullition. La Place believed it to be in a state of actual combustion, the spots being immense caverns or craters, caused by eruptions or explosions of elastic fluids in the interior.

The most probable opinion is, that the body of the sun is opaque, like one of the planets; that it is surrounded by an atmosphere of considerable depth and that the light is sent off; from a luminous stratum of clouds, floating above or outside the atmosphere. This theory accords best with his density, and with the phenomena of the solar spots.

Of the *temperature* of the sun's surface, Dr. Herschel thinks that it must exceed that produced in furnaces, or even by chemical or galvanic processes. By the law relative to the diffusion of light, he shows that a body at the sun's surface must receive 300,000 times the light and heat of our globe; and adds that a far less quantity of solar light is sufficient, when collected in the focus of a burning-glass, to dissipate gold and platina into vapor.

The same writer observes that the most vivid flames disappear, and the most intensely ignited solids appear only as black spots on the disc of the sun, when held between him and the eye. From this circumstance he infers that however dark the body of the sun may appear, when seen through its spots, it *may*, nevertheless, be in a state of most intense ignition. It does not, however, follow of necessity that it *must* be so. The contrary is at least physically possible. A *per-*