# THE SCIENTIFIC PHENOMENA OF DOMESTIC LIFE: FAMILIARLY EXPLAINED

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The Scientific Phenomena of Domestic Life: Familiarly Explained by Charles Foote Gower

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# **CHARLES FOOTE GOWER**

# THE SCIENTIFIC PHENOMENA OF DOMESTIC LIFE: FAMILIARLY EXPLAINED







NOON.

- VAVAVAVAV

The figures denote Greenwich time when the line marked Meridian of Greenwich is brought opposite to them.

Direction in which the San shines, or UN. 12 o'clock line.

## SCIENTIFIC PHENOMENA

OP

### DOMESTIC LIFE.

FAMILIARLY EXPLAINED

BY

CHARLES FOOTE GOWER, Esq.

SECOND EDITION.

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### THE SCIENTIFIC PHENOMENA

OF

#### DOMESTIC LIFE.

#### INTRODUCTORY CHAPTER.

" Nature and Nature's laws lay hid in night."—Pors... God sald, Let Newton be, and all was light."—Pors...

4" If cannal concourse did the world compose, And things and hits fortuitous arose; Then anything might come from anything; For how from chance can constant order spring >"—Blackmons.

In these days of education and of the march of intellect, we commonly teach our children every art, every science, and every accomplishment that the mind of man can suggest; but it is too often that we forget to teach them that which would turn all these to good effect. We forget to teach them to think, to reason, to observe. It is for this purpose that this little book has been written; it is to illustrate the great book of Nature; for in it the child who has been taught to reflect will be furnished with an inexhaustible fund of amusement and instruction; and what to others is a blank, to such a youth will be replete with food for thought. And, moreover, every fresh scientific fact attained, will lead us. as a necessary consequence, to farther discoveries, all united together, and each step to information will tend to facilitate the next, and thus render its attainment more satisfactory, as a link in the great chain of the glorious works of their Divine Author.

"A mind which has once imbibed a taste for scientific inquiry," says Sir John Herschel, "and has learnt the habit of applying its principles readily to the cases which occur, has within itself an inexhaustible source of pure and exciting contemplations: one would think that Shakspeare had such a mind in view, when he describes a contemplative man as finding

 Tongues in trees—books in the running brooks, Sermons in stones—and good in every thing."

Accustomed to trace the operations of general causes, and the exemplification of general laws, in circumstances where the uninformed and uninquiring eye perceives neither novelty nor beauty, he walks in the midst of wonders; every object which falls in his way elucidates some principle, affords some instruction, and impresses him with a sense of harmony and order. Nor is it a mere passive pleasure which is thus communicated. A thousand subjects of inquiry are continually arising in his mind, which keep his faculties in constant exercise and his thoughts perpetually on the wing, so that lassitude is excluded from his life, and that craving after artificial excitement and dissipation of mind, which leads so many into frivolous, unworthy, and destructive pursuits, is altogether eradicated from his bosom."

The mind thus accustomed to search into the causes of different effects will not ascribe every strange or curious occurrence to the agency of chance or accident; for though to the unthinking and indolent this may appear to be a very satisfactory explanation, the mind desirous of knowledge will not rest satisfied with such meagre food, but rather will be well assured, that where there is an effect produced there must also ever be a producing cause.

" All nature is but art unknown to thee;
All chance, direction that thou caust not see."

In those circumstances, where chance \* cannot readily be charged with any particular or mysterious

Whilst on the subject of chance, it may be worthy of remark that even games of hazard can hardly, strictly speaking, be termed so. Let us take, for instance, the act of tossing up a shilling to see on which side it will fall. In this case, if we were aware of the exact weight of the soin, and the force employed to project it into the air, with the rotary motion communicated to it, we should be able to calculate the height it