

at stated intervals, are extremely useful, as being likely to disclose facts of which, but for them, we should possibly have ever remained ignorant. Thus, for example, when the comet of Encke, which performs its revolution in a period of a little over three years, was observed at each return, it disclosed the important and unexpected fact, that its motion was continually accelerated. At each successive approach to the sun it arrives at its perihelion sooner and sooner; and there is no way of accounting for this so satisfactorily as that of supposing that the space, in which the planetary and cometary motions are performed, is everywhere pervaded by a very rarefied atmosphere or ether, so thin as to exercise no perceptible effect on the movements of massive solid bodies like the planets, but substantial enough to exert a very important influence on more attenuated substances moving with great velocity. The effect of the resistance of the ether is to retard the tangential motion, and

allow the attractive force of gravity to draw the body nearer to the sun, by which the dimensions of the orbit are continually contracted and the velocity in it augmented. The final result will be that, after the lapse of ages, this comet will fall into the sun. This body, a mere hazy cloud, continually flickering as it were like a celestial moth round the great luminary, is at some distant period destined to be mercilessly consumed. Now the discovery of this ether is deeply interesting as bearing on other important physical questions, such as the undulating theory of light; and the probability of the future absorption of comets by the sun is important as connected with a very interesting speculation by Professor William Thomson, who has suggested that the heat and light of the sun may be from time to time replenished by the falling in and absorption of countless meteors which circulate round him; and here we have a cause revealed which may accelerate or produce such an event.

## GLEANINGS.

A humble man is like a good tree—the more fruit it bears, the lower it bends.

PERVERSY.—Some men put me in mind of half-bred horses, which grow worse in proportion as you feed and exercise them for improvement.

*Greville.*

The following beautiful lines, dated 1632, quoted in the *Atlantic* for June, in an article on Chess, allude to the pawn's "going to queen."

### THE PAWN.

A lowly one I saw,  
With aim fixt high:  
Ne to the righte,  
Ne to the lefte,  
Veering, he marched by his Lawe;  
The crested Knyghte passed by,  
And haughty surplice-vest,  
As onward towards his heste,  
With patient step he prest,  
Soothfaste his eye;

Now, lo! the last door yieldeth,  
His hand a sceptre wieldeth,  
A crowne his forehead shieldeth.

So mergeth the true hearted,  
With aim fixt high,  
From place obscure and lowly:  
Veereth he nought;  
How many loyall paths be trod,  
Soe many royall crownes hath God.

### EPIGRAM FROM THE GERMAN OF LESSING.

<p>While Fell was reposing himself on the hay, A reptile concealed 'till his leg as he lay;</p>	<p>But all venom himself, of the wound he made light, And got well, while the scorpion died of the bite.</p>
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