tal philosopher had formed a just idea of the nature of the sun. I am happy to be able to add a further explanation of this discovery of Arago's, from Dr. Lardner's very popular lectures in New York. In page 17, he says, on the subject of Light of the Sun:

"In optics a beam of light is proved to be susceptible of a peculiar modification, called *Polarization*. Light may undergo certain changes, which shall polarize it, imparting to two of the sides of the ray opposite to each other, a certain proportion which the other two do not possess. The question arises what are these properties?

" They are various; one, however, is so simple and so nearly connected with the demonstration to which I call your attention, that I shall mention it. If a ray of light tall upon a reflecting surface with either of these two sides which are represented by the red sides of this wand, it will be reflected at an angle equal to that by which it approached the surface. But, if it strike the surface upon the other opposite sides-the blueit will not be reflected at all; so that two of its faces are capable of reflection, while the other two are This is one of the qualities by which polarized not. light is characterised. In a ray which is not polarized, reflection takes place under all circumstances, but with polarized light only under certain conditions. Thus, we see that light may exist is two distinct states. Now this is the truth which has been contributed to this demonstration by the discoveries of modern optics. Let us turn to another branch of physics.

The science of heat has received more attention within a few years past than any other branch of ph mu

con

stal

and

bec

(as

of i

true

He

phil

soli

the

ava

scie

of t

for

cent

heat

dete

the

ing

that

liqui

the

who

aid

MA

pher

A

Т

N