

### CONCLUSIONS ABOUT MARS.

By Prof. Simon Newcomb.

**I**T is sometimes said that we are not justified in inferring the conditions of life in other worlds from what we see on ours, because in each world the form of life will adapt itself to the surrounding conditions. Now if on our planet we found this to be the case—if life were equally abundant everywhere—the argument would be stronger than it is. As a matter of fact, we do not find life to flourish in the arctic regions. We are therefore, able to say from our own observation that there are conditions under which life, so far as we can judge from experience, will not be much if at all developed.

It may seem that this tends to lessen our faith in the wide diffusion of any high form of life elsewhere, and to strengthen the contention of Alfred Russel Wallace that there is no other world than ours adapted to the production of life. But this is not the correct conclusion. The very fact that we are able, from comparing what is going on in the equatorial and the arctic regions of our planet, to say definitely that the former are highly adapted to life, strengthens the contention that under all circumstances where the temperature and other conditions are similar to those which prevail in our torrid zone, life will probably be developed on a large scale.

Of course, the existence of life does not imply the development of a race endowed with reason. We cannot say anything definite on this point until the investigators of human evolution are able to tell us just how it happened that the human race appeared upon our earth when it did.

It seems to require a certain amount of scientific training to avoid forming an opinion when one has no grounds of knowledge. But it is what the trained investigator of nature must always learn to do. So when he is asked whether he believes in life on Mars, the best he can say, in the writer's opinion, is that, so far as we can infer from all the facts and principles of science, the conditions seem to be unfavorable to any form of life unless of the very lowest order, and that he has no opinion as to whether even this order of life actually exists.—Harper's Weekly.