

the action of water through long ages must accomplish its gigantic work of disintegration and sedimentation. Soil must be formed, and water must penetrate it. In short a possible abode of life not unlike the earth apparently must be a frequent occurrence in space.

## V

### GENERAL COSMOGRAPHICAL CONCLUSIONS

Such, in the present state of knowledge, are the general cosmographical views which naturally suggest themselves to one who considers the possibility of life throughout the universe. The solar system appears to be, in its most general traits, a fair sample of the whole; the sun is a typical star; the planets are certainly members of a large class of similar bodies. These various types of material aggregation are a good deal alike wherever they occur. They are formed of the same matter, probably in very much the same proportions. They are actuated by the same manifestations of the same energy, and their evolutionary histories are similar. One and all are likely to possess, for a longer or shorter time, climates which make life possible. On the other hand, it is already obvious that