## CHAPTER IV.

## AGRICULTURE AS AN INDUSTRIAL ART.

So far as I am enabled to understand the public desire in

reference to my duties, they are the following:

1st. That I should investigate the mineral and other natural resources of our State, with a view to rendering them more available to agriculture and other branches of our productive industry.

2d. To examine into substances useful to our agriculture,

that are or might be advantageously imported.

3d. To indicate the best means of applying the principles

of the sciences to agriculture.

It has been my aim to perform these services in such manner as to be most advantageous to our productive interests. The most useful results of my investigations in their practical applications, are recorded in the present or former report, or have been communicated orally and by letters in reply to inquiries from individuals.

It has been my endeavor to bring into notice materials which are now, or might be made, more fully available to useful purposes, and thus add to the wealth of the State.

The increasing desire for a knowledge of scientific principles, so far as applicable to agriculture, has induced me to introduce such in their appropriate places, and treat them in such manner as to be easily understood.

It has been necessary to resist the temptation to consider at large many interesting questions in science not within the scope of either the first or second report. These would, however, find a place in a full and final report upon the geology and resources of the State, should the State government provide for its completion.

Before concluding this report, which may be the last I shall have the honor to make to the Assembly, it is proposed to take a general view of the important subject of tilling the earth and the connection of science therewith.

If the intelligent farmer will take the trouble to study the subject of soils and their origin, in connection with the sciences involved, he cannot fail to have added much to his stock of knowledge that will assist him in farming well. It was for the purpose of aiding in promoting this important