of nitric acid; the nitric acid gives up an atom of oxygen which converts the sulphurous anhydride to sulphuric acid, thus:

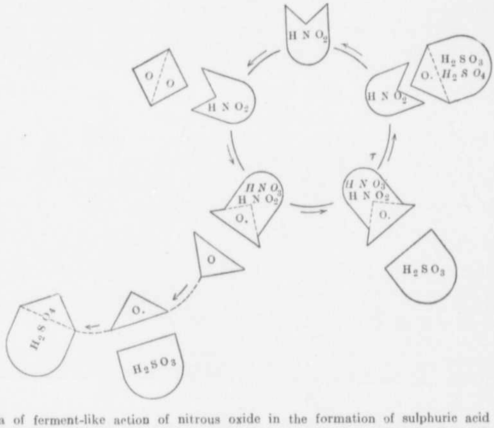
$$H_2SO_3 + HNO_3 = H_2SO_4 + HNO_2$$

The nitrous acid, so formed, exposed to the air, combines with its oxygen and forms nitric acid, thus:

$$HNO_2 + O = HNO_3$$

Theoretically, a single molecule of nitric acid can convert an infinite number of molecules of sulphurous anhydride into sulphuric acid and at the completion of the action (if infinity could be completed) still exist as a molecule of nitric acid.

Fig. 9



Schema of ferment-like action of nitrous oxide in the formation of sulphuric acid from sulphurous anhydride. The completed circle represents the successive stages of activity of the HNO_2 molecule, first attaching to itself an O molecule from an O_2 combination, and then yielding this to an unsatisfied H_2SO_3 molecule. To the left of the diagram it is suggested that the other O molecule liberated from the O_2 combination may also combine with an H_2SO_3 molecule to form a second molecule of sulphuric acid.

In this process there are three factors—the sulphurous anhydride represents the fermentescible substance, the oxygen the fermentator or complement, and the nitrous acid, which alone is present in both reactions, the ferment. The process can be represented as above.

If instead of the bodies in the above picture, we consider that we are dealing with protein molecules with their unsatisfied affinities, we can conceive the process as being instigated by their unsatisfaction and concluded by their satisfaction. Enzyme action is one form of the interactivity of the biophores. This being so, one of our com-