THESIS.

Subject: Order of The Development of The Intellectual Powers.

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After the mind has germinated by means of the action of some external force or stimulus, it advances by regular and successive steps, increasing the number and strength of its powers and the variety and complexity of its operations until it reaches its maximum development. Before considering the order of the development of these mental powers something concerning the nature of their development will not

be amiss. History has shown us that in the growth and development of civilization nations have fallen not because of any weakness in themselves so much as because of the rapid and superior development of some perhaps almost unnoticed rival. So, in the development of the mental powers, each is made prominent and then is succeeded by that which is next above it and for which it has prepared the way.

The process

of mental development may be considered as divided into three stages, in each of which is displayed a number of powers having the same general character.

In the first stage the perceptive powers are most prominent. When the organs of sense are brought in contact with something external the result is an impression upon them. This impression is carried to the brain by the sensory nerves and the mind receives a sensation. Thus a knowledge

of the external world, which the mind must have, is given to it by the senses each of which transmits its own peculiar impression; and as the mind is entirely dependent upon sensation for a knowledge of external objects, the correctness of the statement that "all knowledge takes its rise in the senses," is evident.

The attitudes of the mind toward a sensation constitute attention. It is evident from this that in the growth of the mind

sensation must precede attention, for without it the mind could not germinate, and attention would be not only useless but impossible. At first attention is non-voluntary but as it is brought more under control it becomes an invaluable aid in securing new sensations, and enters as a most important constituent into all classes of mental operations.

In order that a sensation may be retained in the mind as knowledge, it must be repeated until it

is referred to some particular object and direction in space. Thus when a child hears the sound of a bell for the first time he receives merely a sensation, but when he refers the sensation to its producing cause, he receives something retainable in the form of a percept. This power of the mind by which it is made fully conscious of a sensation after attention has been given is called perception. From this we see that both attention and sensation are necessary

to produce a percept; and so will we find that the exercise of each power of the mind involves the exercise of all that have preceded it.

The mind is now ready for a new class of faculties and is drawn away from the dominion of mere sensation impressions and passes from the sphere of perception and intuition to that of imagination and representation The great work of the perceptive powers has been to store the mind with a

knowledge of external objects and their qualities; but the act of perception is momentary and in order that this knowledge may be retained, a new class of powers is developed and the mind may be said to enter the second stage of its development.

The powers by which the mind retains and reproduces past impressions are called imaginative powers. Of this class the most important is

imagination or the power to recall, recover, and reproduce past impressions. The form in which it first appears is called reproductive imagination in which the several parts of the representation follow the order of perception. At the same time the power of association is developed and is of great assistance to the imagination in its work of recalling. In reproductive imagination the images are supposed to be exact copies of past impressions;

but when the mind is
called upon to form an image
of something with which it
is unfamiliar, it goes beyond
past experience. Hence, to form
such an image the mind
must in some way modify,
transform, and recombine the
images of memory. This power
of combining old elements
in new wholes is called con-
structive imagination.

We have seen how
the mind has progressed
through the successive steps
from sensation to imagination

and have considered the means by which it gains and retains knowledge, but besides these powers for gaining and retaining, there is yet to be considered a class of a still higher character whose object it is to use this knowledge and to apply it to its proper ends. These are the thinking or reflective powers. To perceive, remember, and imagine have reference to some particular object; but the mind has power to reflect about the general

objects of a class and it is this power, thinking, which marks off most broadly human from animal intelligence.

Thinking may be more clearly defined as a reviewing and arranging of the store of cognitions gained by perception and retained by memory.

Three stages of thinking are recognized; conception, or the formation of general notions which constitute the elements of thought, judgment, or the combining of concepts in

The form of a statement or proposition, and lastly, reasoning, or the drawing of an inference or conclusion.

The number of intellectual faculties is now complete and "Our intelligence is now much higher in the scale of development and embodies all the anterior developments in one harmonious, definite unity."