

SCIENCE DEPARTMENT.

[A series of Notes prepared for THE MONTHLY, by Henry Montgomery, M.A., Coll. Inst., Toronto.]

THE third session of the Natural History Society of Toronto has just drawn to a close. Although for lack of Governmental or other liberal pecuniary assistance this Society is reluctantly obliged to fall far short of the objects in view, yet considerable energy and enthusiasm are manifested by its members. Additions have been made to both museum and library, and several important papers read and addresses delivered at its meetings throughout the past winter.

WE are informed by Mr. W. E. Hidden that he has in his possession as many as seven crystals of quartz, having the *basal plane* present, and that all of them have been collected in Burke County, North Carolina, during the past year. The basal plane is rarely met with upon a quartz crystal, only a very limited number of such crystals having been known to mineralogists before the recent discoveries referred to. Similar specimens were also found in Alexander and Catawba Counties of the same State.

AN American explorer has lately discovered an insect of the family *Coccidæ*, to which the cochineal or scale insects belong. It has been found in Yucatan, and is there known by the name of *Neen*. In that part of Central America the *Neen* occurs in myriads, is yellowish-brown in colour, and gives out a peculiar odour. The body contains a considerable quantity of a greasy substance, which is believed by the inhabitants of that region to possess useful medicinal properties for the skin. When strongly heated the more volatile oils are driven off, and a tough shellac-like wax is left behind. This wax is said to make good varnish, and, when burnt, to be converted into a thick plastic mass, resembling a solution of India rubber.

THE American Association for the Advancement of Science held its annual meeting in the City of Boston during the week beginning August 25th, 1880. Many of the most prominent scientists in America were present on the occasion, and participated in the proceedings. Scientific papers of great interest and value were read and discussed.

DRY pine cones are very combustible; they are easily kindled with a match, and are therefore frequently used to kindle fires in different European countries. They are so resinous that a couple of cones will readily ignite a wood fire, and very few more are needed to start a coal fire. In Paris there is hardly anything else made use of for kindling material than pine cones. Why are they not used for the same purpose in the large cities of this continent?

SEVERAL insects possess electrical properties similar to those of the *Gymnotus electricus* (Electric Eel) and *Raia Torpedo* (Torpedo Ray). *Reduvius serratus* or "Wheel-bug" of the West Indies gives an electric shock to the individual it touches. Major-General Davis tells of having picked up the "wheel-bug" and placed it upon his hand, to which, upon touching, it administered a shock like that from an electric jar or machine. He felt it "as high as his shoulder, and dropping the creature, he observed six marks upon his hand where the six feet had stood." On suddenly touching with the hand a beetle of the family *Elateridæ*, Lady de Grey experienced a shock extending as far as the elbow. Another instance of the effect upon the human economy resembling an electric shock is recorded as produced by the larva of one of the South