able for purposes of illustration in the departments of Mathematical and Experimental Physics. Besides instruments to illustrate Mechanics (Statics and Dynamics) and Optical instruments, such as Microscopes, a Telescope, Sextant, &c., there is a good collection for Hydrostatics and Pneumatics, another for Heat, and a very full collection for Magnetism and Electricity (Statical and Dynamical) including Electro-magnetism, Magneto-electricity, Dia-magnetism, Thermo-electricity the measurement of Electric resistance. The collection for Light (which has been ordered from Duboscq of Paris, but has not yet arrived) includes, besides apparatus illustrative of the common phenomena of optics, the best instruments for exhibiting on a large scale with the aid of the electric light the phenomena of Interference, Diffraction, Polarization and Double Refraction. There is a good collection for Sound (made by Koenig). The apparatus for Dynamical Electricity and Heat has been made by Messrs. Elliot Brothers, of London, makers of the apparatus used by the Committee on Electrical Standards British Association for the Advancement of Science.

## IV. CHEMICAL LABORATORY.

The Laboratory is furnished with the Apparatus, Specimens and Chemical Reagents necessary to illustrate the class lectures in Chemistry; and is also fitted up with all the necessary appliances for the work of a class in Practical of the Chemistry and for Chemical Analysis.

## V. METEOROLOGICAL AND MAGNETIC OBSERVATORY.

The Basement of the Building is devoted entirely to the observations on Terrestrial Magnetism.

The Ground Story and Leads are the portions of the Building devoted to Meteorological observations.

The Transit tower is for the purpose of furnishing time to the City, and to the Ships in the Harbour, and is connected by Electric Telegraph with a "Time Ball" at the wharf.

The principal Meteorological Instruments are :-

Thermometers for determining the Temperature of the Air.

Barometers for ascertaining the atmospheric pressure.

Psychrometers for the purpose of determining the Elastic force of Aqueous Vapour, the relative Humidity and Dew Point. Instruments for recording the Solar and Terrestrial Radiation.

The direction and velocity of the wind are registered by a modification of Dr. Robinson's Anemometer.

Rain and Snow Guages for indicating the amount and duration of Rain and Snow. Ozoneometer for recording the amount of Ozone.

Transit Instrument.

Observations on Storms, Auroras, Haloes and most of the Natural Phenomena which mark the variation of Climate are duly recorded.

The Instruments in the Basement of the Building are for determining the four Magnetic Elements; and consist of, (1) a Declinometer for measuring the Declination or Variation of the Magnet; (2) an Unifilar Magnetometer consisting of an apparatus for deflection and vibration, for ascertaining the horizontal Magnetic force; (3) an Inclinometer or Dip-Needle (No. 30 used in the Magnetic Survey in Great Britain) for showing the Inclination or Dip. From these observations are reduced the absolute value of the Magnetic Elements.

The whole are under the supervision of Professor Smallwood, M. D., LL.D., D. C. L.

## Lectures in the Andergraduate Course in Arts and Special Courses. SESSION 1868-9 EAR 0 C

FRIDAY.

THURSDAY.

WEDNESDAY.

Mathematics

TUESDAY.

MONDAY