

Miscellaneous.

THE BEAUTY OF LIFE.

"Truly the light is sweet, and a pleasant thing it is for the eyes to behold the sun."
Solomon.

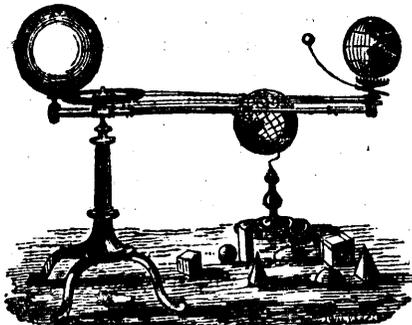
Life is beautiful ; its duties
Cluster round each passing day,
While their sweet and solemn voices
Warn to work, to watch, to pray.
They alone such blessings forfeit,
Who through sloth their spirits cheat ;
Or, in selfish stupor sitting,
See the rust their armour eat.

Life is beautiful ; affections
Thrill with joy its golden string,
In its opening blossoms nestle,
Bird-like 'mid its branches sing,
Smiling rock its cradle slumbers,
Guard with pride its youthful bloom,
Fondly kiss its snow-white temples,
Dew the turf that decks its tomb.

Life is beautiful with promise
Of a crown that cannot fade ;
Life is fearful with the threatening
Of an everlasting shade.
May no thoughtless worldling scorn it,
Wandering wide in folly's maze ;
Duty, love, and hope, adore it,
Let its latest breath be praise.

A SWARM OF BEES.

B patient, B prayerful, B humble, B mild,
B wise as a Solon, B meek as a child ;
B studious, B thoughtful, B loving, B kind ;
B sure you make matter subservient to mind
B cautious, B prudent, B trustful, B true,
B courteous to all men, B friendly with few ;
B temperate in argument, pleasure, and wine ;
B careful of conduct, of money, of time ;
B cheerful, B grateful, B hopeful, B firm,
B peaceful, benevolent, willing to learn ;
B courageous, B gentle, B liberal, B just ;
B aspiring, B humble, because thou art dust ;
B penitent, circumspect, sound in the faith ;
B active, devoted, B faithful till death ;
B honest, B holy, transparent, and pure ;
B dependant, B Christ-like, and you'll B secure.



THE TELLURIAN.

As this instrument is now introduced into a great many of our Canadian schools we give an illustration of it, together with the following explanatory sketch of its uses and value :—

The tellurian is designed to illustrate all the phenomena resulting from the relations of the Sun, Moon, and Earth to each other. The most important of these phenomena are the succession of day and night, the change of seasons, the change of the Sun's declination, the different lengths of day and night; the rising and setting of the Sun north of east in summer, the changes of the Moon, solar and lunar eclipses, spring and neap tides, the later daily recurrence of the tides, length of days on the Moon, the appearance of the Earth to observers on the Moon, the harvest Moon, the difference of a synodical and sidereal revolution of the Moon, the precession of the equinoxes and the difference of a solar and sidereal year. All these phenomena may be explained by the tellurian, with a clearness and simplicity that bring them within the comprehension of a child. Before passing to an explanation of the manner in which they may be illus-

trated, I shall describe the construction of the instrument, and give directions for its adjustment.

CONSTRUCTION.—The Tellurian, as seen by the cut, consists of the stand, the arm, the three fixed pulleys, the handle, the three moveable pulleys, the inclination wire, the Moon's orbit plane, the extension screw, and the three balls representing the Sun, Earth, and Moon. Of these three balls the globe is three inches in diameter, the small ball seven-eighths of an inch, giving nearly the true proportionate size of the Moon ; and the large ball five inches ; the true proportionate size of which would be nearly twenty-eight feet. The proportionate distance of the Moon from the Earth would be seven and a half feet ; while the earth should be placed at the distance of two thousand nine hundred and sixty-nine feet from the Sun. It is perceived that an instrument giving the true proportionate sizes and distances could not well be constructed ; and were it constructed, would require either a telescope or microscope to examine it. Notwithstanding the proportions are not preserved in the tellurian, the causes of the various phenomena appear much more clearly than if they were.

Of the three fixed pulleys, only the upper and larger one is seen in the figure. There are three corresponding moveable pulleys on the end of the arm, each moving independently of the other. The upper pair of pulleys, one moveable and one fixed, being connected with a cord passing around both, serve to give motion to the Moon around the Earth. The middle pair, connected by a cord in a similar manner, give a slow motion to the moon's orbit plane. The lower pair, being both of the same size and connected with a cord, preserve the parallelism of the inclination wire or axis of the earth.

The extension screw is used to tighten the cords when they become slack by use.

ADJUSTMENT.—In setting up the instrument, screw the upright standard, to which the arm and fixed pulleys are attached, into the circular base ; place the moveable pulley, with the orbit plane, on the wire at the end of the arm ; arrange the cords around the respective pairs of pulleys, crossing the cord which goes around the upper pair, (this is the longest cord of the three ;) place the globe on the inclination wire, and the sun or large ball on the wire in the handle ; then turn the stand so that the dividing line, between Aries and Pisces, on the horizontal circle on the large fixed pulley, shall be on the east side of the center ; again, by applying the thumb and finger to the lower moveable pulley, turn the inclination wire and globe on it, so that the north pole of the globe shall be directed toward the north star. The instrument is now adjusted.

If by means of the handle the arm is turned around, it will be observed that the sun and the earth revolve around a common center of gravity ; that the sun revolves on its axis by coming in contact with the large pulley ; that the moon revolves around the earth thirteen times, while the earth goes round the sun once ; that the parallelism of the earth's axis is maintained, always pointing toward the north. The revolution of the earth on its axis is effected by striking the globe lightly with the finger. The motion of all the balls should be from west to east in the southern part of their orbits.

THE VOYAGE OF THE DEAD,

A FEARFUL AND TOUCHING INCIDENT IN THE ARCTIC SEAS.

During a period when so much anxiety prevails respecting the fate of Sir John Franklin, every thing relating to the Polar Regions is of interest. The following sketch, from the Westminster Review, is one of the most thrilling nature.

One serene evening in the middle of August, 1775, Capt. Warrens, the master of a Greenland whaleship, found himself becalmed among an immense number of icebergs, in about 77° of north latitude. On one side, and within a mile of his vessel, these were closely wedged together, and a succession of snow-coloured peaks appeared behind each other as far as the eye could reach, showing that the ocean was completely blocked up in that quarter.

Capt. Warrens did not feel altogether satisfied with his situation ; but there being no wind he could not move one way or the other, and he therefore kept a strict watch, knowing that he would be safe as long as the icebergs continued in their respective places.

About midnight the wind rose to a gale, accompanied by thick showers of snow, while a succession of tremendous thundering,