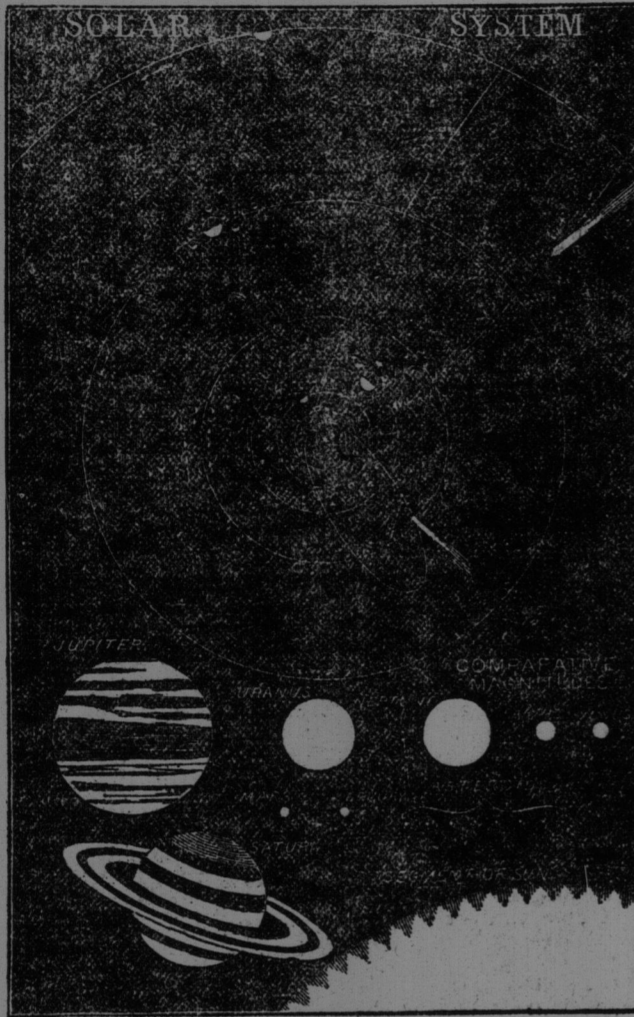


THE EVENING TIMES, ST. JOHN, N. B., SATURDAY, OCTOBER 30, 1909

HALLEY'S COMET

By Frederic Campbell, Sc. D. President of the Department of Astronomy, Brooklyn Institute.



The Solar System, showing paths of planets, and of comets of long and short periods.

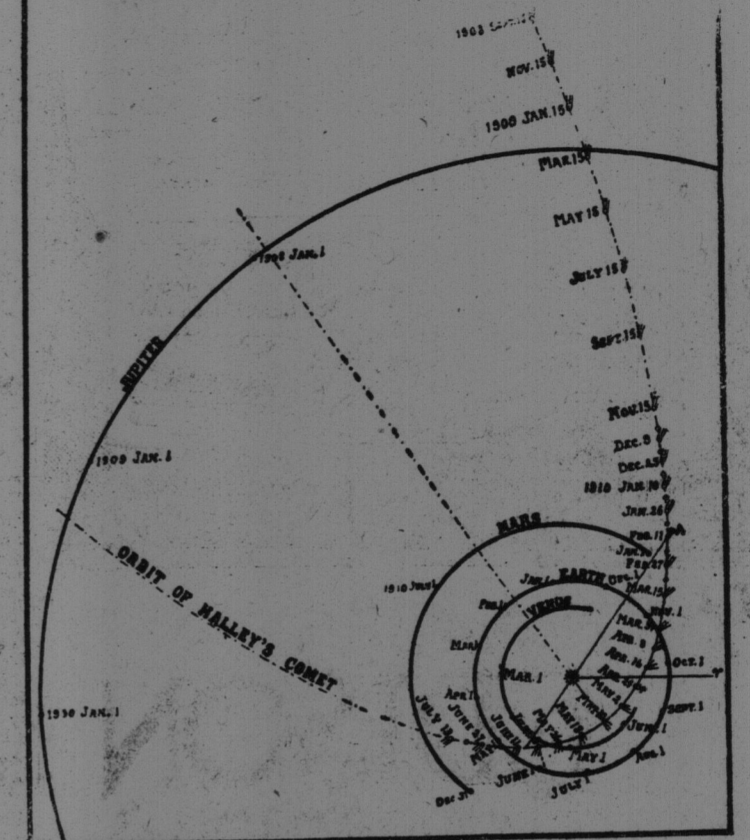
(Copyrighted 1909 by Frederic Campbell.) COMING from a distance 800,000,000 miles greater than that of the most remote planet, and returning from an absence of 75 years, it now revolves upon us to trace the movements of that great comet, already discovered in our sky, and soon to be seen for months by everyone who has eyes. It is true that the comet's motion is followed only in our own immediate vicinity. But the curve which it makes while within our view proves the curve that it must make when beyond, so that we are able to track the monster as it we saw it every day.

The planets travel not perfect circles, but ellipses, a little longer one way than the other; and, not in the centre, but at one of the two foci of each ellipse, nearer one end than the other, the sun is found. A periodical comet also travels an ellipse, but much more flattened or eccentric, so that its path may run nearer the sun in one direction, and farther back into space in the other, than that of any planet.

Halley's comet is usually about 75 years in making its complete orbit, it is 37.2 years traveling back to the sun from its most distant point, known as "aphelion." Though it comes from a much greater distance than Neptune, it makes no approach to that planet, its path bearing off quite an angle. Hence, as it draws near, we do not need to think of it as passing any planet before Jupiter. But, as it approaches the sun, it also rises to that general plane on which all the planets travel, so that, when calculations show that it crossed Jupiter's path about March 15, 1909, we are interested to know it. The two bodies were then distant from the sun about 480,000,000 miles. There was then a wide space to cover, and an immense number of asteroids to pass; but, as an ocean liner avoids the fishing fleet off the coast of Newfoundland, so the comet steers to one side and runs no risk of collision.

And now the comet is in sight, far beyond the orbit of Mars, having been detected on September 17 by Professor Wolf of Heidelberg, Germany. It will not cross Mars' path till about February 27, 1910, more than two months after we have begun to see it with the naked eye. Steadily increasing in speed, by March 31 it due to cross the path of the earth. It dashes across the orbit of Venus about April 20, and on May 10 is at "perihelion," its nearest to the sun, swinging about that body at a distance of 66,000,000 miles therefrom, and moving at top speed.

As it begins its retreat back into space, about May 30 it is again crossing Venus' path, and the 16th of June the earth's. The comet will then be regarded as past history, for it will have gone from view, both telescope and camera failing to report anything further. But so exact are the operations of mathematics that, on any day and at any hour a skilled astronomer can tell just where the comet is, how fast it is going, and how near it is to the sun, the nearest planet, or the earth.



The comet's path from February 12 to June 3, as indicated by the unbroken line, is above the plane of the earth's orbit; the rest, indicated by broken line, is below the same.

W. C. T. U. WORK IN CANADA ADVANCING, SAY THE REPORTS

Yesterday afternoon and Evening Busy Times for Dominion Convention—Welcome Extended at the Evening Session—Some Statistics

The Dominion W. C. T. U. convention had busy sessions yesterday afternoon and evening. Mrs. F. H. Waycott presided at the conference of the "Y" department in the afternoon. The reports of the corresponding secretary, Mrs. Annie M. Hasoon, and the treasurer, Mrs. Sara J. Odell, were received and adopted. These were very encouraging. Mrs. E. G. Waycott, secretary of the "Y" branch, read her report which showed the work to be in a very encouraging condition all over Canada.

REBUILDING THE WHOLE BODY

That is the Constant Business of the Blood.

And That is Why a Blood Making Tonic Will Make the Body Well and Keep it So. Pure, red blood is the vital principle of life, for upon it the tissues of the body live. It goes practically to every part of the body, carrying nourishment and oxygen, taking up the wastes and so changing them that they may be cast out by the breaking down of some of the tissues and the formation of waste materials, the body is in a constant state of change. To maintain health, strength and life the blood must be pure in order to replace those tissues with plenty of fresh nourishment and rid the body of its waste material.

SAFETY FOR CHILDREN

TEMPERANCE IN KENT COUNTY

Mothers should never give their little ones a medicine that they do not know to be harmless. The so-called soothing medicines contain opium that stupefy the child without curing its ailments. An over-dose of these medicines may kill the child. Baby's Own Tablets is the only child's medicine that gives the mother the guarantee of a government analyst that it contains no poisonous opiate or harmful drug. The Tablets cure constipation, indigestion, wind colic, diarrhoea, destroy worms, break up colds, and make teething easy. Sold by all medicine dealers or by mail at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

ROBINSON TO PRISON TWENTY EIGHT YEARS

Sudbury, Ont., Oct. 29—The scene in the Sudbury court this morning at the trial of James Robinson for murder was one which affected the spectators. Ann Robinson, the prisoner's wife, under sentence of death, in the shadow of the gallows, sat in the witness box, her husband, a prisoner, sat in the dock with her head bowed below the railing, the only part of him visible being a tuft of hair. Robinson was acquitted of murder of his daughter's illegitimate children after he had been found guilty of rape against his own daughters, and sentenced to twenty-eight years in Kingston penitentiary by Justice Magee on three charges.

Musk Ox-Robes. We have purchased all the Musk Ox-Pelts sold on the London Market this year. The fur is a deep brown-black except the small buff colored center and every well kept robe will increase in value every year. We have them in all sizes suitable for sleighs, automobiles, pony sleighs, or any kind of vehicle and they can be used as floor rugs. The prices range from \$100 to \$250 and will be worth twice that amount in a few years time. This will be your only chance to purchase a genuine Musk Ox Robe for some years to come, as the law now forbids the killing of the animal and we control the whole output, which will be disposed of this season. Write us today. Your inquiry will receive our personal attention and we will explain to you our plan by which you can see the robe before paying for it. Lamontagne Limited. BALMORAL BLOCK, MONTREAL. Makers of High Class HARNESSES, TRUNKS, BAGS, Etc.

ASK HIGHER WAGES. Cleveland, O., Oct. 29—A crisis among railway employes, it is believed in railway circles, is drawing near. A movement for an increase in wages is thought to have been planned. Prest Lee, of the Brotherhood of Railway Trainmen and Grand Master W. F. Stone, of the Brotherhood of Locomotive Engineers, returned to their headquarters here today from Chicago, where they have been in conference with officials of the Brotherhood of Locomotive Firemen and the Order of Railway Conductors. It is believed the conference related to a demand for an increase and that the matter will be submitted, in a referendum, to the members of the various organizations. It is further said that a referendum vote now is in progress among 100,000 or more members of the Trainmen and Conductor's Associations east of Mississippi river. Some people are more afraid of germs than they are of a mad dog.

H.P. SAUCE. The New Sauce—thick, fruity and delicious! H.P. Sauce reproduces to perfection the distinctive flavours of the rich Eastern fruits and spices from which it is so cunningly prepared. Made in England—every drop. Stores are selling H.P.—here!