

phenomena produced by the inclination of the earth's axis to the plane of its orbit, of which we are daily witnesses, though but few are able to understand, may, by means of this globe and its attachments, be made comprehensible by all. The geometrical scale of sines and cosines attached to the twilight circle over the inclined terrestrial axis, gives a useful and true illustration of the sunlight orbit of the globe's poles round the celtic axis a device highly useful to a draftsman in tracing the different phases that any parallel of latitude can take through sunlight and darkness during the year.

LOUIS SWIFT, Director.

Warner Observatory, Oct. 22nd, 1886.

Testimonial from Prof. O. C. Wendale, of Cambridge Astronomical Observatory :—
MR. TURNBULL,

I have examined the terrestrial globe as devised by you and find it is a highly useful article. It comprehends several novel devices quite unlike those of ordinary terrestrial globes, and by it several new problems may be solved, while for use in the school it must prove to be an excellent accessory.

Harvard, Cambridge, Oct. 30th, 1886.

O. C. WENDALE.

UNIVERSITY COLLEGE, Toronto Jan. 21st, 1886.

Dear Sir,—Your improved globe was recently examined by Dr. McLellan, and a number of prominent public school inspectors, and the opinion formed of it by all who took part in the examination was in the highest degree favourable, I know that the doctor himself is of the opinion that one of your globes ought to be at least, in every County Model School in the Province, and that it would be of material service to have it introduced into as many as possible of the public and high schools. It would enable pupils readily to understand various important matters in physical geography, which, for the most part, they now *really learn by rote*. Yours very truly,

GEORGE PAXTON YOUNG.

Testimonial which was received from the late S. J. Watson, an eminent scientist and poet of Toronto :—

I have carefully investigated the principles on which Mr. M. Turnbull has constructed his Astronomical Globe. These principles are at once natural, scientific, and easy of comprehension. By this Globe the study of geography, which was before a task for the young, will now become a pleasure. The apparatus presents a complete and visible explanation of the physical phenomena which characterise the earth as a member of the solar system.

From the time when globes first came into use for illustrating the science of geography to the present day no such invention as Mr. Turnbull's has been given to the world. It will mark the beginning of a new era in the art of geographical and astronomical instruction. It is the work of a man who has been gifted with the rare faculty of translating great scientific knowledge into the shape of an apparatus which is a masterpiece of practical and beautiful mechanism.

S. J. WATSON,

Late Parliamentary Librarian, Ontario.