

their time from the last meridian. As an example, all places lying between the Greenwich meridian and the 1st hour meridian, will have exactly the same time and be one hour ahead of the time used between the 1st and 2nd hour meridian. From this statement it is easily seen that all clocks, watches, etc., will indicate the same minute and second, but differ in the hour, depending upon what two meridians they lie between. Take the two meridians between which Kingston lies; the 5th meridian, longitude 75° west of Greenwich, passes through Aultsville, or near where the concession line running between Dundas and Stormont meets the River St. Lawrence. The 6th meridian longitude 90° west of Greenwich, runs in a line north and south through Springfield and Madison, about 75 miles west of a line running north and south through Chicago. On our latitude this represents a distance of over 600 miles between these two meridians, and between which all clocks, etc., will indicate exactly the same time. That is, Prescott will have the same time as Chicago though they are nearly an hour apart; it looks absurd yet it can not be otherwise. If we adhere strictly to the rules laid down in the new time regulations, how are we going to reconcile the state of affairs in a town like Sisul? In this town the 6th meridian passes through the centre and if we do not violate the regulations the eastern portion of the town will be one hour ahead of the western. I will now briefly consider how much Kingston will be thrown out of true time by the new regulation. A line running N and S through the centre of the Court House is $76^\circ 28' 37''$ W of Greenwich. That is $1^\circ 28' 37''$ W of the 5th meridian from which we must borrow our time. As 24 hours = 360° , 1 hour = 15° , or $1^\circ = 4$ minutes. Now $28' 37'' = 28.616$; and to find its value in time we have $60' = 4$ minutes; from which we find the value of 28.616 thus $\frac{28.616}{60} \times 4 = 1.907$, 1 m 54.4 seconds. This gives Kingston's time 5 minutes 54.4 seconds ahead of true time. All almanacs containing the rising and setting of the sun, moon, planets, etc., and which are calculated in true time and thus correspond for all places, will be no longer of any use. And any place requiring such knowledge will have to calculate special tables for its own

use, which tables will be of no use for other places, except those 15° distant from it, or some multiple of 15° . Again, all meridians, marks, sun-dials, etc., will be useless, which makes it inconvenient for the majority of people who rely upon such simple and accurate means for determining their time. I will not speak of the novelty of such expressions as fifteen o'clock or half-past twenty-one o'clock, which will be inconveniences only to be overcome by use and practice.

M. D.

THE PRINCIPAL'S ADDRESS.

POSITION OF QUEEN'S AND UNIVERSITY COLLEGES DEFINED—PRINCIPAL GRANT ANSWERS SOME CRITICS
—WHAT QUEEN'S COLLEGE NEEDS—A
FAIR DISCUSSION.

ON the first Wednesday in November the Theological Faculty of Queen's opens, and the matriculation examinations are held. We give that portion of the Principal's inaugural address which bears on legislative aid to colleges:—

In my address on "University Day" I referred briefly to Legislative assistance to higher education in Ontario, and as this is the first public opportunity afforded me of reviewing what has since been said on the subject I may be pardoned for referring to it again before I speak directly to the students of the Theological Faculty. The press, so far as it has touched the subject, has, I think in the main, endorsed the position that in the present circumstances of the Province only two courses are open. The State may aid every well equipped college that is admittedly doing good work, work that the Province would have to do if it was not done already; or the various Colleges must appeal to the public generally, and their friends in particular, for the additional funds they may require from time to time. No third course is possible.

—TONE OF THE CONTROVERSY.

I desire to thank heartily the writers who have done me the honor of criticizing my address for their general courtesy of tone and desire to get at facts and principles. Controversy ceases to be barren and bitter when men recognize that their opponents are gentlemen. I for one would not have spoken on this subject at all had I not felt that University College in chasing a shadow was in danger of losing the substance, and that even the gain of a paltry grant would cost the country dear if it led to the renewal of hard feelings between Colleges. There is an evident appreciation of this side of the case. Those who would like to see their own College extended indefinitely at the public charge feel that an annual legislative contest "would minimize if not utterly destroy the value of the benefit sought," and in stating his own position, one writer, who evidently speaks for others, has asked me to consider it fairly and to give my views a little more fully. I shall do so with the trust that he and his friends may try to look at the subject from our standpoint.

The one argument on which my critics seem to me to rest their case is as follows: University College is the cope stone of the Ontario system of public education; therefore, University College and *it alone* should be supported by the Legislature; not only so, but it should be supported *wholly* by the Legislature; and further, it should be extended *indefinitely*, and irrespective of the