Our Astronomical Column.

THE DATE OF EASTER.—It seems a curious anachronism that our calendar in the twentieth century should still be largely influenced by the lunar chronology which passed out of direct use nearly two thousand years ago. That was the most obvious system to employ at the dawn of astronomy, the moon's rapid motion and the ease of locating its position in the heavens making it far superior to the sun as a time-measurer. But as time went on the inconvenience of having a variable number of months in the year, and of having events like the equinoxes and solstices occurring on variable dates, caused the system to be abandoned and a purely solar calendar substituted.

The Passover was, of course, on a fixed date of the lunar calendar, the fourteenth day of the first month, and, owing to the close association of this feast with the events commemorated at Easter, an attempt has been made to follow the ancient system of fixing its date. That this is mainly the result of sentiment is shown by the fact that Christmas and other feasts are kept on fixed days of the solar year; moreover, the coincidence with the ancient method is not perfect, since Easter is tied to one day of the week, which was not the case with the Passover. This fact alone may produce a deviation of six days, so that it is obvious that no serious principle could be involved in increasing the deviation to a fortnight or thereabouts, which is all that a fixed date demands. Many unofficial ecclesiastical pronouncements have shown that there is no strong hostility to such a change. Lord Desborough brought the matter forward in a letter to the *Times* on July 20, and in the House of Lords on the following day, pointing out the inconvenience felt by the schools, universities, law terms, etc., through the variable date. The Earl of Onslow did not give much hope of Government action, but this is clearly a matter for international, not merely national, arrangement. The Astronomical Union in its session at Brussels last July appointed a Committee on Calendar Reform, with Cardinal Mercier as chairman, and it is understood that the date of Easter was one of the subjects of reference. The present time, when so much is in the melting-pot, would seem to be a particularly hopeful one for promoting this and similar reforms.

ASTRONOMY IN TOWN PLANNING.—It is a sign of awakening public interest in astronomy that a paper should be read before the Ottawa centre of the R.A.S. of Canada on the importance of considering practical questions of incidence of sunlight in planning out new towns. The author, Mr. H. L. Seymour, refers to the action of sunlight on bacteria and to the importance of letting all rooms get their share of sunlight, which is best secured by making the corners of the houses point to the four cardinal points, which means that the streets should run from N.E. to S.W. and from N.W. to S.E. He quotes Mr. Horace Bushnell as having put forward the same idea in 1864; but, nevertheless, the tendency has been rather to make the streets run N.-S. and E.-W., with the result that northward walls get no sunshine at all for more than half the year. In the planning of garden cities, where the houses are not contiguous, it is also important to place them so that the shadow of one house may not fall on another, or at least to minimise such incidence. The heights of buildings should also be so regulated that those opposite them are not in perpetual shadow.

The Empire Timber Exhibition.

By ALEXANDER L. HOWARD.

THE Overseas Trade Department of the Board of Trade some time ago conceived the idea of organising an exhibition which should be a representative collection of those timbers which form the forest wealth of the countries which constitute the British Empire. This excellent scheme, possibly the direct outcome of the experiences of the war, was cordially and unanimously supported by the representatives of the Governments overseas.

Among the many lessons learned as a result of the war none was of greater importance than the knowledge that was brought home to us of our great dependence upon the products of the forest for the making and building up of every possible kind of offensive and defensive engine of warfare as well as for the maintenance of the daily requirements of ordinary life. From the time when the proposals of the Board of Trade were first considered every effort was made by the representatives of the different States of the Empire and by the officials at home to see that not a stone was left unturned to show conclusively what it was possible to achieve in the matter of timber production from every source. By a happy chance the date for the exhibition was fixed to coincide with that of the British Empire Forestry Conference, which brought together representatives of the Forest Services throughout the Empire, and there can be no doubt that such an exhibition must form the best possible opportunity for the forest man to gauge the value of the work upon which he is engaged.

The countries of the world may be classed into three grades: one which possesses a competent scientific forest service with practical work in full operation; a second which also possesses such a forest system, but lacks the practical application of theory; and a third which possesses neither scientific nor practical forestry. It is regrettable that until a very recent date the United Kingdom must have been classed in the last category, and, although much has been done in the past few years to remedy the situation, it is doubtful whether the great national importance of the subject has yet been fully realised.

The Empire Timber Exhibition entailed an enormous amount of continuous hard work and persistent energy which eventually resulted in bringing together a collection of many hundreds of timbers from every part of the Empire, and certainly the majority of those of any commercial importance. A collection of this kind is not easy to gather together, and it is doubtful whether such an opportunity is likely to be again available for a very long time.

The following are a few of the more noteworthy of the exhibits of the various countries:

British East Africa.—The considerable forest resources of this country are practically unknown and their exploitation is yet in its infancy. The most important timber is pencil cedar (*Juniperus procera*), which is slightly harder and more brittle than the American variety (*J. virginiana*). So far it has not been much appreciated by British manufacturers, although its importance may be gauged from the fact that in 1910 31,000 logs of this timber were imported into Germany from what was then German East Africa. As the majority of the lead pencils used in this country before the war were of German manufacture, the importance of this supply is obvious.

The Gold Coast.—Supplies of the timbers of the Gold Coast have already been seen in this country, but this exhibit showed many which are unknown here, though, as with other countries, much confusion