return as to street and road tramways during the year ending June 30, 1896, signed by Mr. Francis J. S. Hopwood, is just issued. It shows that the total capital expended in England and Wales during the year was £11,742,204, as compared with £11,685,355 in the preceding year. The total for the United Kingdom was £15,195,993, against £14,956,343. The length of line open for public traffic in the United Kingdom was 1,009 miles, an increase of 27 miles on the preceding year. While the horses used by the companies increased from 32,273 in 1894-95 to 35,621 in the succeeding year, the number of locomotive engines belonging to the companies decreased by two. The engines numbered 568 in 1895, as compared with 452 in 1896 and only 14 in 1878. The total number of passengers carried on the tramways in the United Kingdom during the year was 759,466,-047, against 661,760,461 in the preceding year; the working expenses £3,105,511, against £2-878,490; and the net receipts £1,046,505, against £855,200. There were 37 tramways belonging to local authorities, with a total mileage of 335 as compared with 116 belonging to other than local authorities with a mileage of 673.

THE Annual General Meeting of the Royal Meteorological Society was held on January 20th, Mr. E. Mawley, President, in the chair. The Secretary read the report of the Council, which showed that the Society had made steady progress during the past year, there being an increase of seventeen in the number of Fellows. The President then delivered an address on 'Shade Temperatures,' in which he stated that of all meteorological observations there were none approaching in importance those made of the temperature of the air, generally known as 'Shade Temperature.' Indeed, the first question invariably asked in regard to almost any climate was as to its temperature. Mr. Mawley traced the history of the different methods of exposing thermometers since the time that regular observations of the weather had been made in this country. For many years open screens were most favored by meteorologists, that devised by Mr. J. Glaisher, F.R.S., and the late Astronomer Royal (Sir G. B. Airy) being the pattern principally used. In 1864 Mr. T. Stevenson, C.E., invented an admirable form of closed screen with lowered sides, which was considered preferable to the open type of screen, and has now almost entirely superseded the Glaisher Stand. In 1883 the Stevenson screen was considerably improved by a committee of the Royal Meteorological Society. Mr. Mawley then described his own experiments at Croydon and Berkhamsted, as regards this improved screen, known as the Royal Meteorological Society's pattern. He showed that the only two defects which had been attributed to this form of thermometer exposure were virtually non-existent, and therefore advised its general adoption both in this country and on the Continent. Mr. Mawley had recently made observations in the Stevenson screen, and also in the screens used in France and Germany, and the conclusion he had come to was that the results obtained in the Stevenson screen were not only the nearest to the true air temperatures, but also more likely to be strictly comparable with temperatures taken in a similar screen but with different surroundings elsewhere.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of the late Mrs. Horatio Lyon, of Springfield, Mass., gives, among other public bequests, $10,000 to Monson Academy, $10,000 to Pomona College and $10,000 to Menden Free Library.

HARVARD UNIVERSITY has received from Mr. J. Howard Nichols $5,000, to be used for the founding of a new scholarship, preference being given to a student from the State of Alabama.

THE will of tho late Charles Willard, of Battle Creek, Mich., leaves $40,000 to the Baptist College at Kalamazoo, Mich., and $40,000 for a library building for the city schools at Battle Creek, Mich.

THE new physiological and pathological laboratories of Queen's College, Belfast, were formally declared open on January 19th, and on the following day an address was made by Lord Lister. The building contains two floors about 80x40 feet in size, the lower one being devoted to physiological and the upper to pathological laboratories.

DR. L. A. BAUER has been appointed assistant professor of mathematics and mathematical physics at the University of Cincinnati. He will not enter on his new duties before September.

DR. R. W. T. GÜNTHER has been elected fellow of Magdalen College, Oxford, and tutor of natural science.

DISCUSSION AND CORRESPONDENCE.

COMPLIMENT OR PLAGIARISM.

WE have no occasion to withdraw any of our previous statements by reason of Professor Halsted's second communication.

We still maintain that "the same order may be found in Newcomb's Elements of Geometry." After proving that *by dividing the arc we divide the angle* and, conversely, *by dividing the angle we divide the arc*, Newcomb gives the following problems, which we compare with Halsted's:

NEWCOMB.	HALSTED.
PROBLEM I. *To divide a given circle into* 2, 4, 8, 16, *etc., equal parts.*	PROBLEM I. *To bisect a perigon.*
PROBLEM II. *To divide the circle into* 3, 6, 12, 24, *etc., equal parts.*	PROBLEM II. *To trisect a perigon.*
PROBLEM III. *To divide a circle into* 5, 10, 20, *etc., equal parts.*	PROBLEM III. *To cut a perigon into five equal parts.*
PROBLEM IV. *To divide a circle into fifteen, etc., equal parts.*	PROBLEM IV. *To cut a perigon into fifteen equal parts.*

Professor Halsted must think us very childish, indeed, if we assert that the word perigon is found in several geometries when the word is found in only Halsted's books and our own. He will find the word in Smith's Introductory Modern Geometry of Point, Ray and Circle, in Dupuis's Elementary Synthetic Geometry, in the later editions of Newcomb's Elements of Geometry, in Faifofer's Elementi di Geometria. But, perhaps, Professor Halsted will say, "All these books appeared after my Metrical Geometry in 1881, and these authors took the word from me." We have reason to believe that W. B. Smith, Newcomb and Faifofer all did see the word for the first time in Halsted's books.

The question then remains: "Where did Professor Halsted get it? Did he invent it, as he substantially asserts, or did he find it ready made?" This we cannot answer. We can only say we know where he might have found it.

In Sandeman's Pelicotetics, or the Science of Quantity, Cambridge [England], Deighton Bell and Co., 1868, which Professor Halsted might have seen in the Princeton University library, or in the Peabody Institute library at Baltimore, we read (page 304): "A PERIGON is the angle without any overlapping bounded by two straight lines lying in the same straight line upon the same side of their common end.

"A straight line being everywise alike upon all sides everywhere throughout is in any plane through it anglewise alike upon both sides at any point in it, and hence half a perigon or a HEMIPERIGON is the unoverlapping angle bounded by two straight lines lying in the same straight line upon opposite sides of their common end. A right angle is both one-half of a hemiperigon or a HEMISEMIPERIGON and one-fourth of a perigon."

That this same book was in the hands of Instructor Lefevre of the University of Texas, when he wrote his Number and its Algebra is fairly obvious from the following extract:

PELICOTETICS.	NUMBER AND ITS ALGEBRA.
"Driven to the * * * outrageously overtowering extravagance and absurdity of finding and raising high as a principle that a chain of reasoning to be strong and good need not have meaning in every link; that, in other words, the conclusiveness of an argument has nothing to do with the intelligibility of its several steps, or that things may be thoroughly made out true for reasons nowise to be understood."	"Accept the outrageous extravagance that a concatenation of deductions to be valid need not have meaning in every link; that a compulsory conclusion of an argument does not require intelligibility of its several steps; or that results may be thoroughly made out true for reasons nowise understood."

To us it seems well-nigh incredible that the man who made the important discovery in 1879 "that Princeton possesses * * * the identical volume from which the first translation of Euclid into English was made by Sir Henry Billingsley," and who, in 1896, "for four months * * * was buried in the uttermost parts of Hungary, Russia and Siberia," where he "made many important finds," could have failed to discover such an excellent word as 'perigon' in a book almost daily before his eyes.

BEMAN AND SMITH.

PROFESSOR JASTROW'S TEST ON DIVERSITY OF OPINION.

A DIVERSITY of answers is possible to Professor Jastrow's case of reasoning without being false in any one of them. Answers may de-