

MERCURY sets on the 1st at 4h 48m p.m., or 16 minutes after the Sun; on the 6th at 4h 43m p.m., or 19 minutes after sunset; on the 11th at 4, 42m p.m., or 24 minutes after the Sun has set; on the 16th at 4h 43m p.m., or 33 minutes after the Sun sets; on the 21st at 4h 46m p.m., or 41 minutes after the Sun; on the 26th at 4h 51m p.m., or 54 minutes after sunset. He is near Moon on the 7th; he is in aphelion on the 3rd.

VENUS sets on the 1st at 6h 21m p.m., or 1h 49m after the Sun has set; on the 6th at 6h 25m p.m., or 2h 1m after the Sun; on the 16th at 6h 35m p.m., or 2h 25m after sunset; on the 26th at 6h 57m p.m., or 3h 0m after the Sun sets. She is near the Moon on the 10th.

MARS rises on the 1st at 11h 53m p.m., on the 6th at 11h 47m p.m., on the 18th at 11h 36m p.m., on the 28th at 11h 21m p.m. He is near the Moon on the 29th.

JUPITER rises on the 1st at 2h 53m a.m., on the 8th at 2h 33m a.m., on the 18th at 2h 4m a.m., on the 28th at 1h 33m a.m. He is near the Moon on the 3rd and 30th.

SATURN rises on the 1st at 7h 41m p.m., on the 6th at 7h 21m p.m., on the 16th at 6h 40m p.m., on the 26th at 5h 58m p.m. He is near the Moon on the 24th.

DECEMBER.

THE MOON will be near Jupiter during the morning hours of the 1st; she will be near Mercury on the 8th; she will be near Venus during the evening of the 10th; she will be near Saturn during the night common to the 21st and 22nd, being to the right of the planet throughout the greater part of the night; the nearest approach will be at 5 a.m. on the 22nd, after which the planet will be to the right of the Moon, and she will be near Mars from the time of Moon rising throughout the night, being situated to the right of the planet. Her phases or times of change are:—

New Moon	on the 6th at 17 minutes after 1h in the afternoon.
First Quarter	" 14th " 22 " 6 " afternoon.
Full Moon	" 21st " 59 " 8 " afternoon.
Last Quarter	" 28th " 22 " 0 " afternoon.

She is most distant from the Earth on the 10th, and nearest to it on the 23rd.

MERCURY sets on the 1st at 4h 57m p.m., or 1h 5m after the Sun; on the 6th at 5h 0m p.m., or 1h 9m after sunset; on the 11th at 4h 52m p.m., or 1h 8m after the Sun has set; on the 16th at 4h 24m p.m., or 35 minutes after the Sun sets; on the 19th at 3h 57m p.m., or 6 minutes after the Sun; on the 19th he rises at 7h 56m a.m., or 7 minutes before sunrise; on the 23rd at 7h 6m a.m., or 1h 1m before the Sun; on the 28th at 6h 31m a.m., or 1h 37m before the Sun rises; and on the last day at 6h 22m a.m., or 1h 49m before the Sun has risen. He is near the Moon on the 8th. He is at his greatest eastern elongation (21 deg. 14 min.) on the 1st, stationary among the stars on the 9th, in his ascending node on the 12th, in perihelion on the 17th, and in inferior conjunction with the Sun on the 19th.

VENUS is an evening star setting on the 1st at 7h 7m p.m., on the 6th at 7h 18m p.m., on the 16th at 7h 39m p.m., on the 26th at 7h 56m p.m., and on the last day at 8h 18m p.m. She is near the Moon on the 10th. She is at her greatest eastern elongation (47 deg. 16 min.) on the 9th.

MARS rises on the 1st at 11h 17m p.m., on the 7th at 11h 8m p.m., on the 17th at 10h 50m p.m., on the 27th at 10h 27m p.m., and on the 31st at 10h 21m p.m. He is near the Moon on the 27th. He is in quadrature with the Sun on the 3rd.

JUPITER rises on the 1st at 1h 24m a.m., on the 8th at 1h 2m a.m., on the 18th at 0h 29m a.m., on the 27th he rises at 11h 56m p.m., and on the 31st at 1h 40m p.m. He is in quadrature with the Sun on the 26th.

SATURN rises on the 1st at 5h 36m p.m., or 1h 44m after the Sun sets; on the 6th at 5h 15m p.m., or 1h 24m after the Sun; on the 16th at 4h 32m p.m., or 43 minutes after sunset; on the 22nd he sets at 8h 25m a.m., or 22 minutes before sunrise; on the 26th at 8h 12m a.m., or 5 minutes before the Sun; and on the 31st he rises at 7h 51m a.m., or 18 minutes before the Sun. He is near the Moon on the 22nd. He is in opposition with the Sun on the 26th.

ECLIPSES IN THE YEAR 1885.

In the year 1885 there will be two Eclipses of the Sun, and two of the Moon.

1. March 16. An Annular Eclipse of the Sun, invisible from Greenwich. The Central Eclipse begins in longitude 156 deg. 42 min. W. of Greenwich and latitude 35 deg. 54 min. N., at 40 minutes after 4 p.m., and ends in longitude 15 deg. 7 min. W. of Greenwich and latitude 71 deg. 20 min. N., at 52 minutes after 6 p.m.

2. March 30. A Partial Eclipse of the Moon, not visible from Greenwich. The Eclipse begins at 59 minutes after 2 p.m.; the middle of the Eclipse will be 34 minutes after 4 p.m., and the Eclipse will end at 10 minutes after 6 p.m. The Moon will rise at 6h 30m p.m., after the Eclipse is over.

At the time of the middle of the Eclipse nearly nine-tenths of the Moon's diameter will be obscured.

3. Sept. 8. A total Eclipse of the Sun, invisible from England. The Central Eclipse will begin at 57 minutes after 7 p.m., in longitude 154 deg. 55 min. E. of Greenwich and latitude 41 deg. S., and the Central Eclipse will end at 48 minutes after 9 p.m. in longitude 77 deg. 40 min. W. of Greenwich and latitude 74 deg. S.

4. A partial Eclipse of the Moon on the morning of Sept. 24. It will begin at 15 minutes after 6 a.m. (about half an hour after the Moon has set at London). The middle will be at 48 minutes after 7 a.m., and it will end at 22 minutes after 9 a.m. At the time of the middle of the Eclipse about three quarters of the Moon's diameter will be obscured.

THE POTATO CROP.

The average annual crop of potatoes throughout the world is as follows:—Germany, 235,000,000 metrical hundredweights; France, 113,000,000; Russia, 110,000,000; Austria, 75,000,000; the United States of America, 47,000,000; Ireland, 38,000,000; Great Britain, 26,000,000; Belgium, 23,000,000; Sweden, 16,000,000; Holland, 15,000,000; Hungary, 14,000,000; Italy, 7,000,000; Norway, 6,000,000; Denmark, 5,000,000; the Australian Colonies, 3,000,000; Portugal, 3,000,000; and Spain, 2,000,000 metrical hundredweights—grand total, 730,000,000 hundredweights.

FINANCES OF THE LONDON CORPORATION.

The City Budget for the year 1883 is a volume of more than 250 quarto pages, and is a maze of figures. The income totalled £706,547; the expenditure being £690,681. Rents and quit rents produced £130,162; markets, £149,445 (but charges equalling £137,195 had to be placed against this latter item). The expenses of civil government are returned at £57,003.

LIFE AND DEATH IN SCOTLAND.

The collation of the Census of Scotland was only completed during the last Session of Parliament; from it we learn that the births were fewer in 1880 than in any one year of the previous five, and fewer in proportion to the total population than in any year since 1855. The birth-rate per thousand was 33·6, while that in England in the same year was 34·2. There was a very slight addition to the number of Scotch marriages in 1880 as compared with the previous year, when it was lower than in any year since the commencement of the reports. The proportion per thousand of the population was 63, but in England the proportion for the same year stood as high as 74. Scotland has, however, the slight advantage over the Southern Kingdom to be found in the fact that while the average of children to every 100 English marriages is but 415, 100 Scotch marriages are calculated to produce 432 children. The death-rates of the two countries for the year were 205 per thousand in England; 204·5 in Scotland. In this respect, therefore, the balance is fractionally in favour of the Northern Kingdom.

The marriage returns, as well as those of births, are instructive on some points connected with the moral and social conditions of the country. It would seem that the "irregular" marriages of Scotland, which have passed into a proverb, have not yet ceased. The proportion is not large, but it was larger in 1880 than in 1879, though smaller than in the year before. The proportion was 1·48 per cent of the whole. By irregular marriages we are to understand such marriages as are contracted without proclamation of banns or religious ceremony. Civil marriage is not yet a recognised institution in Scotland—that is to say, although a matrimonial contract entered into without ecclesiastical rights is valid, it still labours under the stigma of irregularity. Nearly half the total number of Scotch marriages are celebrated by the clergy of the Established Church. In 1880 the proportion of marriages by the ministers of the Church of Scotland was 46·02 per cent. The Free Church comes next, but with only 21·58 per cent, and then follow, *longo intervallo*, the United Presbyterians, with 12·17 per cent. The educational status of the persons married in 1880 showed a slight improvement on the previous year, 92·62 per cent of the men being able to sign the register, against 92·37 the year before. The women able to write numbered 84·79 per cent, against 84·69 in the previous year. In Edinburgh not three men out of a hundred married were unable to sign their names, but in Glasgow the proportion of illiterates rises to above 11, and in the case of women is more than 26. The greatest degree of ignorance is found in the counties of Ross and Cromarty. In these counties only 77·6 per cent of the bridegrooms and 49·3 per cent of the brides were able to write their names. After these counties follow Inverness, Dumbarton, Bute, and Lanarkshire, in which 10 per cent of the men signed with marks. The like proportion of illiteracy in women was reached in as many as sixteen counties. The total number of illegitimate births in all Scotland for the year was 10,589, a percentage to the whole of 8·5, which is a slight decrease on the proportion of the previous year. The highest proportion of illegitimacy is reached in the counties of Banff and Wigton, where it is respectively 16 and 16·9 per cent. In the cities of Glasgow and Edinburgh the percentage is below that of the whole country, while in Aberdeen and Dundee it is above it.

The deaths for the year were 75,503, or, as previously stated, at the rate of 204·5 to every 10,000 of the estimated population. This was a considerable improvement on recent years, the rate for the decade having been 217·9 per 10,000. The greatest mortality was in what are called the principal town districts, comprising such cities as Edinburgh and Glasgow. In these the rate was as high as 242 per 10,000. In the large towns of the next rank in regard to population it was nearly 224; in the small towns, 202; in what are called the mainland rural districts, not quite 163; and in the insular rural districts, 157. Of the principal towns, Glasgow is the least healthy; its annual mortality averaging 2·61 per cent of the population. Paisley follows very close with 2·59. In Edinburgh the rate falls to 2·13, and in Aberdeen to 2. The infant mortality of Scotland—that is to say, the loss of life during the first year—amounts in the case of boys to 22·63 per cent of the aggregate of deaths, and in the case of girls to 18·31 per cent. These averages are, however, exceeded in all the town districts. The mortality of infants, like that of adults, is greater in Glasgow than in any other part of Scotland. It appears that in the principal town districts not more than 10·5 per cent of the women, who as a rule are longer lived than men, reach the age of 70. In the large towns the percentage is as high as 15·4; in the smaller towns it reaches 18·4; but in the rural parts of the mainland the figure is 29·5, and in the islands 37·6. Thus it appears that one in three of all the persons born may calculate on living to threescore and ten. The oldest man who died in 1880 is said to have been 114. He was a crofter in Caithness. Twenty-four men are reported as having died between 95 and 100, and seven over 100. Seventy-six women's deaths are reported at ages exceeding 95, and falling short of the century; and 19 were over 100. The death of one woman at the age of 120 is reported. The deaths by violence in 1880 were swollen by those of the 59 persons who lost their lives by the breaking down of the Tay Bridge. Nine cases of murder or homicide occurred, but in no instance was capital punishment inflicted during the year.

EDUCATIONAL STATISTICS.

From the Report of the Committee of Council of Education (England and Wales) for 1883-4 we gather that the number of day schools inspected during the year ending Aug. 31, 1883, was 18,540, of which 11,703 were connected with the National Society or Church of England, 4049 with School Boards, 1412 were British and undenominational, 817 Roman Catholic, and 559 Wesleyan. The total average number of scholars in attendance was 3,127,214, of which 1,562,507 were attached to Church schools, 1,028,904 to Board schools, 247,990 to British schools, 162,310 to Roman Catholic schools, and 125,603 to Wesleyan schools. The total amount paid out of the Parliamentary grants for the same year was £2,518,641, of which (excluding shillings and pence) £1,237,006 was paid to Church schools, £848,694 Board, £201,614 British, £127,456 Roman Catholic, and £103,869 Wesleyan. The highest rate of grant per scholar in average attendance was 16s. 6d., paid to the Wesleyan schools, this being closely followed by 16s. 6d. to Board schools; 16s. 3d. was paid to British schools, 15s. 10d. to Church schools, and 15s. 8d. to Roman Catholic schools. The aggregate annual income of the schools was £5,820,981, of which £2,766,721 belonged to the Church schools, and £2,134,234 to the Board schools; and the rate of expenditure per scholar in average attendance was £2 1s. 5d. in Board schools, £1 16s. 3d. in British schools, £1 15s. 0d. in Church schools, £1 14s. 11d. in Wesleyan schools, and £1 10s. 9d. in Roman Catholic schools.