

Illegitimacy and the Influence of Seasons upon Conduct.
Two Studies in Demography (Social Science Series).
By ALBERT LEFFINGWELL, M.D. London: Swan,
Sonnenschein. 1892. Pp. 159.

Dr. Leffingwell's name is not known in England, but this book shows that he approaches the subject of demography in a scientific spirit not too common among us, and also that he possesses considerable literary power in the presentation of his results, though sometimes his style is rather melodramatic. It is thus that he enters on his subject: "Against the background of history, too prominent to escape the observation from which it shrinks, stands a figure, mute, mournful, indescribably sad. It is a girl, holding in her arms the blessing and burden of motherhood, but in whose face one finds no traces of maternal joy and pride."

The first study ("The first treatise in the English language upon the subject of Illegitimacy") deals chiefly with the relative frequency of illegitimacy in England, Scotland, and Ireland, and with the causes generally of its varying prevalence in different countries. The rarity of illegitimate births among the Irish, their extreme frequency among the Scotch, and the intermediate position of England and Wales is well known; but Dr. Leffingwell, with the help of excellent coloured maps of the three countries, brings out clearly the curious and very considerable variations between counties and groups of counties. Thus in Ireland the rate of illegitimate births per thousand is, in Connaught 7, in Munster 17, in Leinster 22, in Ulster 40. A map of the religion of the Irish population shows an exact agreement in colour; in Connaught the Protestants are 5 per cent., in Munster 6, in Leinster 14, in Ulster 52. The author, however, while recognizing religion as an important element, by no means suggests that Protestantism and vice are synonymous terms. In England a line drawn below Norfolk and through the middle of Wales will leave nearly all the counties with a high rate of illegitimacy above it, and most of those with a low rate below it. Essex (34 per 1,000), extra-metropolitan Middlesex (35), and Surrey (40) have the lowest rate of illegitimacy; Shropshire (82), Hereford (76), and Cumberland (76) have the highest rate. In a few cases a county stands very differently, accordingly as we consider the ratio of the illegitimate births to the births generally or to the number of unmarried women; this is especially the case

with Cornwall, where the illegitimate rate is high compared to the legitimate rate, but low when the total number of unmarried women are taken into account. This may, no doubt, be accounted for by the fact that there is a very large emigration of men from Cornwall. In Scotland the illegitimate rate is low along the west coast, very high along the border and in the north-eastern group of counties, including Aberdeen. That is to say, that those parts of Scotland that are most prosperous, where education is most widely spread, and which have been most productive of remarkable men, are precisely those where illicit unions are most frequent.

In regard to causation, Dr. Leffingwell briefly examines, only to dismiss them, several causes sometimes supposed to be of importance — poverty, ignorance, great cities. He then discusses more fully the three great causes to which, he considers, may chiefly be attributed the wide and apparently irreconcilable differences which exist in regard to the local prevalence of illegitimacy. These are (1) religion; (2) legislation, and legal impediments to marriage; (3) heredity, or the influence of race and ancestry. In regard to the influence of religion, Dr. Leffingwell has not much to say, and brings forward no definite conclusion, because, as he tells us, he purposes hereafter “to treat the larger question of its influence as a restraint against vice and crime.” Legislation, he considers, influences the rate of illegitimacy because every impediment to marriage tends to increase illicit relationships. When, in Bavaria, no young man was permitted to marry until he could prove reasonable ability to support a family, Bavaria stood first in Europe for the proportionate number of its illegitimate births. In Italy reliance on the religious ceremony alone has produced a large number of children legally illegitimate. In England the curious anomaly that the offspring of marriage with a deceased wife’s sister, legitimate in nearly every other part of the English-speaking world, are here illegitimate, is another legal cause for the production of bastards. It is, however, in the influence of race that Dr. Leffingwell finds the chief cause of variations in the rate of illegitimacy. “With few exceptions, the Northern nations of Europe, of Scandinavian or Teutonic origin, apparently show the strongest proclivity to those ante-marital irregularities of which illegitimacy is a sort of gauge.” In Europe the tendency is most prevalent in Norway, Scotland, Iceland, Sweden, Finland, Denmark, Prussia, Saxony, Austria, and

Bavaria. In England also, on the whole, the districts where Scandinavian blood is most marked (such as Norfolk and Cumberland—districts in other respects widely unlike) are those in which the rate of illegitimacy is highest; and the same is largely true of Scotland and Ireland.

In concluding his study of illegitimacy Dr. Leffingwell brings forward several other points of interest. He remarks, for instance, that the statistics of Denmark and of Sweden—the only countries where such statistics exist—show that illegitimate births are commonest, not at so early an age as one might imagine, but between twenty-five and thirty-five years. He also suggests that “quite independently of its ethical relations,” illegitimate unions “tend to level upwards the human race;” legal unions are usually upon a plane of equality; illegal unions tend to break down the barriers between class and class and between race and race, blending dissimilar elements into one great nationality. In this connection he has some interesting remarks about the American of the future: “One cannot travel through the States without noting that the thick lips, coal-black colour, low brow, and flat nose of the Guinea negro have almost disappeared in a hybrid race, with large admixture of English blood—changing not only the colour, but the intellectual capacity of the type; and I do not doubt that before half-a-dozen centuries have expired, the African will have as completely merged his race in the three hundred millions of the North American Continent, as Phœnician and Greek, Saracen, Roman and Norman have blended in the Neapolitan who basks in the sunshine on San Lucia.”

In the second essay—“The Influence of Seasons upon Conduct”—Dr. Leffingwell deals with six phases of human conduct in regard to which the action of a cosmic influence may be recognized:—(1) suicide, (2) crimes against the person generally, (3) murder and assault, (4) crimes against chastity, (5) attacks of insanity, (6) births, especially illegitimate births. This essay is slighter than the first, and scarcely takes sufficiently into account the considerable amount of work already accomplished in this field, notably in Italy.

In every country in Europe the maximum of suicides is reached in May, June, or July. In England and Wales fully sixty per cent. of all attempts at suicide occur in the warm months, and forty per cent. during autumn and winter. Almost the same proportions are found in Japan.

The influence of season in the production of insanity, as shown by the admissions to asylums, has long been recognized throughout Europe. Thus Dr. Ritti, of Charenton, writes in his last report:—"During the last ten years it is in the spring time that the admissions have been the most numerous; they have slightly diminished during summer, and reached their minimum during the last months of the year." The Lunacy Reports for Scotland give statistics accounting for over 38,000 admissions, which show precisely similar results. The maximum of admissions is reached in May, and there is then a gradual and almost unbroken descent to a minimum attained during December and January. There is thus a close coincidence between suicide and insanity, but, as Dr. Leffingwell points out, we are not, therefore, justified in considering the connection as causal; if we separate cases of suicide clearly due to other causes than insanity the same phenomenon is found. "We must look for some influence which is common to both phenomena as an exciting or predisposing cause of each." Crimes against the person are in this country commonest during July, August, and September, less common in the spring quarter, still more infrequent in the last quarter of the year, and least frequent of all in the first. The same influence is still more strongly marked, and in precisely the same order of gradation, if we take rapes and assaults against chastity. During the ten years 1878-87, 32 per cent. occurred in the third quarter, 28 per cent. in the second, 21 in the fourth, and 19 in the first. If we turn to the birth-rate, the maximum of legitimate conceptions takes place during March, April, and May in this country, as well as in Norway, Sweden, Belgium, Holland, and Italy, the minimum being during September, October, and November. In France there are most conceptions during June, July, and August. The illegitimate birth-rate shows an almost similar phenomenon in a more marked degree. With the help of diagrams Dr. Leffingwell brings out these phenomena very clearly.

What is the cause of this strange influence of the seasons upon human conduct? "I am inclined to believe," Dr. Leffingwell writes, "in the close relationship between the great mass of criminal, vicious, and passionate acts arising from the violence of the emotions, and an unsound mental condition. It need not be that complex and completely abnormal state which we call 'insanity.' . . . Either by

the gradual increase of solar light and solar heat, or else in some other manner quite mysterious at present, the breaking up of winter and the advent of spring and summer produces upon all animated nature a peculiar state of excitement or exaltation of the nervous system. Upon evidence, not yet sufficient for demonstration, I am disposed to believe that one effect, both in higher animals and in man, is an actual increase in the quantity of blood sent through the system, or that the heart in reality beats at a quicker rate, with stronger impulse, in April and May, than in November and December." Dr. Leffingwell does not bring forward any observations in support of this statement. It would not, however, be difficult to do so. Thus though opposed by Mr. Coste's daily investigation of the pulse rates through several years, it is supported by the investigations of Marey and others. Nor is there any reference to the mortality rates, although they have distinct bearing upon the question. The "theory of relation between solar influences and human conduct," Dr. Leffingwell formulates as beginning in the gradually increasing light and heat of spring and summer, producing upon men and animals increased heart action, and increased nervous action, which in time give rise to emotional exaltation, increased reproductive instinct, increased tendency to jealousy, increased combativeness, increased irritability of temper, sentimentality, mental depression, and enthusiasm for change; a perceptible and often very marked influence is thus exerted on the birth-rate, insanity, suicide, crime, divorce, duels, riots, revolutions, etc.

From the summary here given it will be seen that this little book, though sometimes rather slight and incomplete in its treatment, is full of interest and suggestion for the student of psychiatric and medico-legal questions.

Le Crime Politique et les Révolutions. Par C. LOMBROSO et R. LASCHI. 2 Tomes. Paris: Alcan. Turin: Bocca. 1892. Pp. 296 and 428.

The French edition of this very suggestive and comprehensive work, in which the political criminal is treated in his relations not only to psychiatry and criminal anthropology, but to law and penology, has been considerably enlarged. The authors admit in the preface that the term