

as forty years ago." The criminal statistics of other countries, notably of England and Belgium, can happily show different figures, judging by the numbers incarcerated now and in previous years, the only trustworthy test indeed. Dr. Christison seems inclined to lay too much stress upon prison systems as affecting the increase and decrease of crime. Where they are manifestly bad, as it is to be feared they are in a very large proportion of cases in the United States, they may manufacture criminals. For example, there is no more fruitful source of crime than the indiscriminate association of prisoners of all classes and categories which is still very general in American prisons. For one Elmira, with its ultra-tenderness for the dishonest, there are hundreds of county gaols where no sort of care is taken to separate the inmates, whether young or old, innocent or guilty; and it is where this separation has been most strictly enforced, as with us, that crime has most appreciably diminished.

But the penal system, however carefully and intelligently worked, is but a small contributory cause to reduction. That is to be found rather in the newer and more enlightened processes of deferred sentences for first offenders and of systematic child rescue, both based upon the excellent principle that crime should be checked in the bud. Dr. Christison enunciates a truism when he declares that crime is frequently associated with bodily and brain disease. No one denies this; it is, too often the poor invertebrate creatures who have no sinew, moral or physical, who lapse into misdeeds, and they deserve pity rather than punishment. But these do not make up the sum total of the great army of crime; they do not include the stalwart, able-bodied habitual criminal—the real crux of modern penology—who has adopted law-breaking as a business, and whom nothing, humanely speaking, will cure. To apply Dr. Christison's kindly milk and water treatment to these would be a mischievous misuse of the power of the law, the first duty of which is to protect the law-abiding from the law-breaking. The habitual criminal should have neither truce nor peace. Penal science is fast tending to establish the somewhat paradoxical apothegm of a well-known writer who has said that offenders may be divided into two great classes: "those who should never go into prison and those who should never be let out"; the first offender who should be left at large on condition that he does not again go wrong, and the habitual criminal who is retained indefinitely, or until he gives reasonable promise that he will not persistently misuse his freedom.

OUR BOOK SHELF.

Chauncy Maples, D.D., F.R.G.S. A Sketch of his Life, with Selections from his Letters. By his Sister. Pp. 403. (London: Longmans, Green, and Co., 1897.)

THE publication of this memoir of Dr. Chauncy Maples—a pioneer missionary in East Central Africa for twenty years—reveals that sympathetic interest in science which has been strikingly noteworthy in some of the most remarkable missionaries of our time. In 1881 Mr. Maples, then stationed at Masasi, made a journey of 900 miles to the Meto country, and in this and other ways contributed to our knowledge of the geography of East

Africa. His papers were appreciated by the Royal Geographical Society, of which he was a Fellow. And he quite entered into the spirit of the recent development of Nyasaland at the hands of the British administrators, founding and editing the *Nyasa News*, which was printed on the island of Likoma by his native boys. Sir Harry Johnston, K.C.M.G., contributed to it, and writes cordially of the late Bishop in his recent book on "British Central Africa." Sir Harry was almost the last European to see him alive; for a few days afterwards he was drowned in the Lake Nyasa, September 3, 1895, on his way to his post. In the Bishop's last letter but one, written, of course, before the knighthood, he says: "I was more struck than ever with the Commissioner's cleverness and accomplishments and his power of doing so many things, as he does, so very well. He is certainly a very remarkable man indeed."

On the other hand, Mr. G. F. Scott-Elliot, a scientific traveller well known to the readers of NATURE, looked upon Chauncy Maples as "an ideal missionary," and described him as "one whose sympathies extend even to Europeans." Several times in the letters now published reference is gratefully made to the geological works of Sir Archibald Geikie. In a private letter dated Likoma, March 14, 1888, Archdeacon Chauncy Maples has the following striking and sympathetic reference to Charles Darwin:—

"It would seem that part of his nature adapted to the reception and cultivation of religious truth got atrophied by disuse, and hence his discarding of Christianity. These things are great mysteries, and when we think of so great and really good a man as Darwin was, we ought to avoid all appearance even of seeming to know *how* he stood in God's sight when his probation was over and his soul returned to God who gave it. . . . Another great point about Darwin was that he never did or said anything that could be construed into a desire to disturb the faith of others; if evolution has disturbed it, it is their fault and not his. I confess to having a good deal of belief in evolution; but it has never disturbed my faith in revelation—no, not one jot" (p. 294).

The late Bishop was, like the friend and colleague who has succeeded him as Archdeacon, the Rev. W. P. Johnson, a graduate of University College, Oxford. His successor, the present Bishop of Likoma, Dr. J. E. Hine, is also an Oxford man, having graduated in science both in Oxford and London. Of the latter University he is M.D. It is also remarkable that another South African Bishop had a distinguished scientific career, both at London and Cambridge. The Bishop of Bloemfontein, the Right Rev. J. W. Hicks, is Doctor both of Medicine and of Theology. He is M.D. Lond., D.D. and Sc.D. Camb., and late Fellow and Science Tutor of Sidney Sussex College, Cambridge. J. F. H.

Les Ballons-Sondes. Par M. de Fonvielle. (Paris: Librairie Gauthier-Villars, 1898.)

WITHIN the last seven years a new epoch has dawned upon the science of aerial travel and investigation.

While the more directly practical advances in flying machines and balloon navigation have caught the popular fancy, a less conspicuous but more valuable means of extending our present knowledge of atmospheric physics has been supplied by the recently organised flight of small, specially constructed balloons provided with self-recording apparatus which, without the deterring weight of observers, have been able to explore regions of the atmosphere far beyond the limits of human endurance.

M. de Fonvielle, the celebrated French aeronaut, has brought together the results so far attained in a neat little brochure entitled "Les Ballons-Sondes," or "sounding balloons." Perhaps "exploring balloons" would be a freer and more euphonious translation.

Here we have in four chapters a clear and simple