

been carried on to improve certain districts which were pest laden. A number of chapters are also devoted to the spread of education in the islands which are still weighted with the superstitions of many anti-Christian beliefs. No field of human activity, in fact, has remained untouched and the statistical record which Mr. Worcester gives will do much to explain the manner in which we have met our obligations as an agent of civilisation.

Throughout the two volumes there are many fascinating descriptions of the islands themselves; and here the author is at his best. The reader detects a real love for the tangled forests rich in lumber, the broad fields awaiting scientific and systematic cultivation, and the mountains full of unmined ore. However one may choose to doubt Mr. Worcester's main contentions on matters of governmental policy, one will readily linger on these chapters for their charm and information. Especially absorbing are the pages in which he describes the first visits made by white men in districts controlled by savage head-hunters. These add a touch of adventure amid the heralding of iterated fact. Among the lighter and more graceful observations those devoted to a description of the abundant game and fish will attract the sportsman. For the Philippines are a very Paradise in the variation of wild life. Especially alluring to the followers of Izaak Walton, it is recorded that there are over fourteen hundred species of fish already reported—many of which are ferocious fighters of size and power. Deer shooting is very common and the tamarau—a true buffalo which appears nowhere in the world except on the island of Mindoro—is one of the most formidable of antagonists. Mr. Worcester makes a curious comment about the crocodiles, which are also very common. It seems that in many pools and rivers the children bathe without apparent fear, even though these animals are resting in plain sight below. Yet individual crocodiles gain evil reputations, and their fame becomes a by-word in the Province.

One conclusion can be safely made

from this book: that the present Administration, whatever policy it may develop toward the government of these islands, cannot afford to ignore the mass of material which Mr. Worcester has gathered together. The individual hostilities among the various tribes, as well as the fundamental distrust between the Mahomedan and Christian groups complicate the question. Mr. Worcester feels very strongly that before they can ever approximate independence these various groups must be amalgamated into a people. At present he sees no such possibility and his opinions, backed by his facts, should warrant the strongest consideration.

George Middleton.

V

HUGO MÜNSTERBERG'S "PSYCHOLOGY AND SOCIAL SANITY"*

No word carries to the modern mind a more complete suggestion of disfavour than the word Academic. It implies a person who, indeed, knows; but whose knowledge is incapable of practical application. The somewhat superstitious reverence for "book-learning" has pretty well disappeared from a society where every one can read what books he will and esteems himself therefore sufficiently learned. Thus the scholarly study of the Drama has for some time been a joke along Broadway; but recently a number of young men have proceeded straight from the drama courses of the universities to the production of plays that succeed. And this case is already one of many. Scholarship and science are attending more and more to the application of their theories, and are teaching the practical man (to his intense surprise) undeniable improvements in his own business. We are breeding a new sort of specialist whose first concern is the use of his specialty. The scholar who did this used to be rather looked down upon by his colleagues as a "populariser."

*Psychology and Social Sanity. By Hugo Münsterberg. New York: Doubleday, Page and Company.

He who devoted his learning plainly to the understanding of the people was, to their thinking, somehow unprofessional: at best a smatterer, at worst a charlatan.

Professor Münsterberg is absolutely above either of these obsolescent reproaches. As a leader in that New Psychology which has moved from metaphysics to science, which studies mental action through physical reactions by scientific experiment and induction, and which applies its results as practically as biology or chemistry, his position is recognised beyond question. He is a leading authority, one of the few most learned and best known specialists in his field. And he is about as academic as Mr. Edison. A mere glance at his table of contents is refreshing to such of us as had considered psychology a sort of abstruse mental solitaire. Telepathy, the quackery of the supernatural, even the mind of the juryman, are not surprising subjects; but to find psychology dealing with investment, advertising, and the modern dance gives the whole subject a queer new air of reality; and when it comes to Socialism, to the Sex Education question, to the probable value in cold cash of psychological science on the modern farm, we realise that something has been happening in the laboratories. Nor is all this a by-product or recreation of the new science, but its main line of research and application. Many of us indeed had already been made aware, from sources as diverse as sundry recent detective stories and the press reports of Professor Münsterberg's own work, that some such thing was going on; yet his book none the less quickens and clarifies the impression. It is before all else practical, and about practical things; there is not a word nor a sentence in it but the veriest layman may understand; and many a native writer might envy this German scholar's clear and easy command of English. There is the sense, too, that in such chapters as that on Sex Education and Modern Dancing, a wiser and better balanced mind than heretofore, as well as one deeper informed and as thoroughly abreast of events, has here spoken some-

thing like an authoritative last word on the subject. He knows: you cannot question his facts, and his reasoning defends itself; nor is there any pedantry on which to hang a doubt of his human fairness and common-sense.

Just because the book is at once so practical and so authoritative, it is the more worth while to object at any point where it fails to convince. Professor Münsterberg is never academic nor uninformed: he is fallible not as a professor but as a scientist. By virtue indeed of being thoroughly scientific he is not untouched by the great Scientific Fallacy, which may be shortly defined as the application of scientific method where it cannot, in the nature of the case, apply. There is just one thing that you cannot prove by experiment: and that is whether experimental conditions alter the natural facts. The scientist knows that all the water in the world must act precisely like the water in his test tube. The scientist does not know how far all the humanity in the world will act like his few chosen subjects. He cannot prove that the man at liberty and the man even unconsciously under observation do not react differently to the same circumstances; and to take this for granted begs that whole question of telepathy which he is attempting scientifically to solve. What we learn about the man in the laboratory may not apply to the man in the street. How accurately it applies we can only guess by recording many natural cases, under the dilemma that the most normal case can be least accurately recorded, and the case most carefully observed may be least natural. This is not to say that the human sciences are futile, but that they are necessarily inexact. So much no one realises more clearly than the scientist himself; but the habit of postulating for the sake of experiment a validity which truly does not exist tends to lead even so sane a human being as Professor Münsterberg aside from the mark. It would be merely impertinent for the layman to attack the precision of his data or the scope of his inductions. But in the field of normal, uncontrolled human

events, the layman is as it were a specialist; and the scientist has here a blind spot in his mental retina.

Professor Münsterberg (for example) is irritated, as many of us have been, by the new magazine practice of running reading matter through the advertising pages. Unlike many of us, he therefore goes to work to find out, scientifically and without prejudice, whether the practice is really good advertising. He prepares a number of specimen pages, half of them filled with clipped advertisements and the rest with advertisements and comic pictures together. He then mixes up the pages, and has a number of people look them over, thirty seconds to a page; after which a carefully managed test shows that the advertisements on those pages which contained no other matter are decidedly the better remembered. It does not apparently occur to Professor Münsterberg that he may unconsciously have selected better or more familiar advertising for his solid pages. But a far deeper flaw is that he consciously and intentionally excludes the question whether an uncontrolled reader spends more time and attention upon the mixed pages. That, from the advertiser's point of view, is the whole question; and by insisting upon thirty seconds to each page, the experiment is practically vitiated.

Another abstraction of the same kind occurs in the experiment upon the correctness of jury decisions. Cards are prepared having slightly different numbers of round spots, the spots varying in size and in arrangement. Two such cards having been shown to an experimental jury, a ballot is taken as to which card contains the greater number of spots; then there is a vote by hands; then follow alternate votes and periods of discussion, until the greatest probable unanimity is attained. It is found that fifty-two per cent. of the jurors decided correctly on the first ballot; whereas seventy-eight per cent. voted correctly after the discussion. These results are for men. Juries of women show forty-five per cent. of correctness before discus-

sion, and precisely the same percentage after discussion; which fact is hereby respectfully offered to the attention of all Feminists. Now, it is evident to any rational mind that this experiment has no flaw within itself. It proves what it sets out to prove: it is an absolutely sound and typical test of the probable accuracy of a jury in determining a purely abstract question. But that is precisely the trouble with it. The life or liberty or oppression of a human being is not merely an abstract question. And that is why we have juries. The equitable chance of emotional bias, the idea that the jury feels humanly what the judge would decide too intellectually upon sheer fact and law, is not only a practical characteristic of the jury system; it is its *raison d'être*. The bare truth (if that were all) would be much better left to the decision of an expert; just as a trained observer like Professor Münsterberg himself, would doubtless have given better results in his own experiment. But its human fallibility is absolutely the only logical ground upon which the jury can be defended.

But these two cases are far from being typical of Professor Münsterberg's thinking or of his book. They are worth noting thus in detail only as exceptions proving the rule of his general sanity and soundness. He has the authority of the expert and the judicial caution of the scientist, who tests everything, seeks impartially to know, and is not to be led into partisan extremes. The thing to notice is the nature of the uncertainty when he does for once in a way appear less than certain. For the error is not in his personal equation, but is the characteristic error of science itself; which tends now and then in this day of its supremacy to let its reach exceed its grasp. Because we owe to modern science almost the whole rise and power and promise of our civilisation, it is the more needful to realise that some human knowledge is forever outside the field of science, just as some human conduct is beyond the scope of law. And the reason for seeking out this fallibility in the work

of Professor Münsterberg is only that the weakness of all human nature is to be sought for at the roots of its strength.
Brian Hooker.

VI

MME. WADDINGTON'S "MY FIRST YEARS AS A FRENCHWOMAN"*

The period covered by these recollections—1876 to 1879—is that of the struggle of the young Republic in France, the third, toward something like stability, under the able leadership of Marshal MacMahon who had been elected President after the forced resignation of Thiers. Party feeling ran even higher than normally. The National Assembly sat at Versailles, the temper of the "man in the street" in Paris being considered even more uncertain than usual. The old society, that of the Faubourg St. Germain, was divided into Legitimists, Orleanists and Bonapartists. On one point only were they united: in their hatred and contempt for the new republic.

Mme. Waddington, first as the wife of the Minister of Public Instruction, to which post M. Waddington was appointed in 1876 and which he held for two years, until he became Minister of Foreign Affairs and finally Prime Minister under President Grévy, had unusual opportunities for intelligent observation of affairs both political and social during this stormy period. That she has availed herself to the utmost of the advantages which were hers as the wife of an able and patriotic statesman, no one who has enjoyed her earlier books will doubt for a moment. Here is no dry chronological recapitulation, but a vivid and graphic picture of the times further illuminated by timely anecdote. In addition to that valuable possession which painters describe as the "seeing eye," she has that even greater gift of projecting what must be a personality of unusual charm onto the printed page. Throughout her nar-

rative, she herself moves, a graceful, cultured and witty figure, giving one the intimate feeling of being "personally conducted" through the scenes she so vividly describes, without ever once becoming intrusive. In sharp contrast to two other American women who, having risen to positions of eminence on the smaller stages dedicated to the tragic and the lyric drama, have within the last few years given the world their recollections, Mme. Waddington never indulges in ill-natured personalities: always she is good humoured, always she is well bred.

The position of the wife of a man in public life in those early days of the Republic was not always easy. On one occasion, when the author was paying a formal visit upon a countess with Legitimist affiliations, she was astonished to have her hostess address her by name every time she made an observation. Upon returning home, she commented on the fact to her husband: "Mme. de B—— must have said 'Waddington' at least twenty times; is it an old French custom?" He explained that it was so that all the other people present might know who she was and not say things about the *infecte gouvernement*, or make slighting remarks about the Republic, "which no gentleman could serve." On one point, of course, all parties were united, hatred of Germany and everything German. For many years after the war, the German military attaché had to return from the annual review at Longchamps in a closed carriage to guard against being insulted by the crowd. Once, at a dinner given at the German embassy to the President and the Maréchale MacMahon, a small bear made its appearance in the drawing-room with the coffee. When Mme. MacMahon was asked afterward if she was frightened, she said: "Yes, I was very much frightened, but I would not show it before those Germans!"

A large variety of interesting figures are presented to the reader, many of whom were in Paris during the International Exposition of 1878. By some timely anecdote or by some little graphic

*My First Years as a Frenchwoman. By Mme. Waddington. New York: Charles Scribner's Sons.