A half-starved pig.

The following fact, though not unexampled, yet seems to me worth record. In the first week of September, 1883, on the farm of Mr. William Burr, in Medina county, O., the steam-thresher was at work; and, as usual, a large stack of straw was gradually accumulated. Two or three days afterwards Mr. Burr missed a fat sow weighing about three hundred pounds. After a long search and much inquiry, he came to the conclusion that she was lost in some unknown manner, and thought no more of her. About the 20th of March, 1884, in pulling down the remains of the straw-stack, the sow was found, thin as a deal board, but living. Her weight was a hundred and sixty pounds. She had been imprisoned for two hundred and five days, without water, and with only the straw for food. Treated with judgment, and fed slightly at first, she did well, and is now growing fat again.

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THE SCIENTIFIC METHOD IN HISTORICAL STUDY.

THE phrase 'science of history' suggests two very different things to different minds. To one kind of persons it means philosophical reflection and combination upon the course of human action in masses, in the purpose of finally discovering the laws by which such action has been governed, and then of applying these laws to prophesy about the future of the race. To these persons, Buckle is the ideal of a scientific historian. He alone, they fancy, has grasped the true principle of historic research, and truly shown the parallelism between the historical and the scientific methods. Just as the naturalist discovers his facts, and then combines them into laws, so the historian shall, it is said, proceed from single phenomena of human effort to the discovery of laws according to which all such human action has moved, and therefore must and will move. On the whole, perhaps, this is the view of historical science which prevails in the minds of most educated persons in America.

But there is another idea suggested by these words to those who have been accustomed to the thought and language of another school. These persons maintain that such effort is not historical work at all, but quite another science, dealing with the *results* of history. It is philosophy, with its general hypotheses and their more or less effectual support in discovered fact. All this should be called, not history, but the philosophy of history, just as there might be a philosophy of literature or of music, pursued successfully, perhaps with the best success, by men wholly untrained in either literature or music. Buckle and his kind, this school asserts, were not historians, but phi-

losophers; and it claims for itself the more modest title. This we may, for convenience, call the modern German school, though it has its followers now widely spread in other lands. Not that Germans of our century have not cared to concern themselves with the wider problems of man's social and political destiny (nowhere, perhaps, have these problems received more thought than just in Germany), but this has remained the province of philosophers; and the men who have raised Germany to the leadership in modern historical research have, on the whole, kept themselves free from all speculation of the sort. To this school, then, the 'science of history' means the pursuit of historical knowledge according to scientific *method*. It concerns itself wholly with extracting from existing material the truth of the record. But to do this, it demands previously the most rigid examination and criticism of the material. For this examination, a wide and deep training in language, and in a general knowledge of the accepted historical tradition, is necessary; so that, while this German school is content to restrict itself within seemingly narrow limits, the man who would conform to all its demands finds a life-work before him, broad and severe enough to call forth all his intellectual energy. Its motto is found in the modest word of the elder Droysen, that the object of historical study is '*forschend zu verstehen*' ('to comprehend while investigating').

The study of history in America is in its infancy. It has remained until now an object of almost complete neglect in the programmes of collegiate as well as of secondary study. This neglect must have had a cause: we have no desire to force an issue between the two schools of historical study; but the fact cannot be overlooked, that, as long as American education remained under the influence of the early English tradition, history, as an item in education, was practically left out of sight. Men had, or professed, an enormous respect for it. One can read orations and lectures by the score, upon the usefulness of history as an element in the life of the present; but when it came to putting this usefulness into play, as a part of a scheme of education, giving to history a fair opportunity by the side of Greek, Latin, and mathematics, history had to give way. Men showed their respect for it by letting it alone. On the other hand, no sooner did the wave of German influence begin, about a dozen years ago, to beat with a violence that could not be disregarded, upon our shores, than the fortunes of historical teaching were

completely changed. Young men, returning from their study abroad, brought home with them this new principle, — to learn while, and by, investigating. All at once a new analogy to the study of nature began to be emphasized. The historian was to accompany the naturalist in his method of taking the thing to be studied in his hand, and applying the microscope to it; but this was to be done no longer with the ultimate purpose of deducing general laws of human progress, but simply of completing the record. Under this new impulse, history has now fairly begun to take its place by the side of other studies, as a subject demanding, in the widest sense of that term, a scientific treatment.

It would be a misfortune if either of the schools we have been examining should gain permanent and complete control over the other. Each has its claim to respect; but, for a long time to come, it seems clear that that view of the subject which has brought about so important, so decisive a change must remain the one to which our science must look for its support and its vindication.

These comments upon the condition of American instruction have been suggested by the appearance of two books, each in its way important for the future of the subject. 'Methods of teaching and studying history,' edited as the first volume of a proposed 'Pedagogical library,' by Dr. G. Stanley Hall, consists of an essay, occupying about half the volume, by Dr. G. Diesterweg, well known in Germany as the author of numerous pedagogical works, and of shorter contributions by professors in leading American colleges, together with an excellent short bibliography of general history by Prof. W. F. Allen of the University of Wisconsin. The importance of this book at the present time lies far more in its general purpose, and in its suggestion of a strong force behind it, than in any special excellence of its own. The treatise by Diesterweg is subject to the criticism, so often deserved by German writing, that it succeeds in obscuring the subject it tries to explain. The translation maintains all the obscurity of the original, and adds much of its own. The essays by American teachers were prepared, on what seems a wholly false principle, without any common understanding as to division of the field, and bear somewhat of the perfunctory character incident to most writing done at the demand of an editor. The various writers repeat each other; and the effect can hardly be to impress strongly upon the minds of teachers in the lower schools any effectual lessons for their own

guidance. It is to be regretted that the German essay could not have been left out altogether, and replaced by something based upon a wider range of thought, and more pertinent to our American problem. If the American writers could have known each what the other was writing, the result would have been more harmonious, and the effect, as a whole, more decided. Yet one advantage has come from this defect: it has demonstrated how strong is the current which is now setting in the direction of what we may call, by a phrase which will cover many varieties of detail, 'teaching by topics.' There is complete agreement, among the writers, on this point, — that effectual teaching in history, as everywhere else, is that which rouses the student out of the dulness of a merely receptive condition, and puts him into the attitude of an original thinker. There would be a multitude of opinions as to the age at which this sort of work should begin, the exact form it should take, its proportion to the work of the memory, and so on. It is to be hoped that an opportunity will be offered for the further development of these points, — far more valuable for the teacher than a philosophical treatise in the cumbrous form of German metaphysical treatment.

Another point emphasized by some of the writers, and tacitly admitted by others, is the necessity for a steady progress of the student in the acquisition of a firm basis for his knowledge in space and time: chronology and geography, learned by a definite act of memory, according to one or another principle, must begin and accompany all study of history. This demand has called forth the second of the books referred to, — Ploetz's 'Auszug aus der geschichte,' translated and enlarged by Mr. William H. Tillinghast of the Harvard college library. This book was originally made for the use of students while engaged in detailed study, to furnish them with a substantial basis of general knowledge. It holds a middle position between a mere dictionary of dates and a connected narrative of general history. The work of translation has been done with something better than accuracy, — with a complete command of the original language, and a conscientious purpose to improve upon the material offered. The new volume is essentially a book for Americans. It will be welcomed by persons holding all shades of opinion as to historical methods, and ought to become a permanent factor in the new development through which the teaching of history is passing.