"Men read in books," says Bacon, "what authors say accuracy; the second, to express with correctness the concerning stones, plants, and animals, and the like, but results of his observations"—yet too frequently (and the to inspect these stones, plants, and animals with their own manuals encourage this) what he is to observe is prede-

in the early part of the seventeenth century, who thus writes: "Since the beginning of knowledge must be with the senses, the beginning of teaching should be teacher, who knows anything of the ways of children or made by dealing with actual things. The object must be a real, useful thing, capable of making an impression but this is the tendency, and a word of caution is needed. upon the senses. It must be brought into communication with them: if visible, with the eyes; if audible, with the ears; if tangible, with the touch; if odorous, with the nose; if sapid, with the taste. First, the presentation of the thing itself and the real attention of it; then the oral explanation for the further elucidation of it. In the same strain wrote John Locke, in 1690: "When he can talk it is time he should begin to learn to read. But as talk, it is time he should begin to learn to read. But as to this, give me leave here to inculcate again what is very apt to be forgotten, viz., that a great care is to be taken that it be never made as a business to him, nor he look on it as a task. We have an aversion for many things for no other reason but because they are enjoined us. I have always had a fancy that learning might be made a play and recreation to children, and that they might be brought to desire to be taught, if it were proposed to them as a thing of honor, credit, delight, and recreation, or as a reward for doing something else, or if they were never chid or corrected for the neglect of it."

Pestalozzi, who commenced his labors in the latter part of the eighteenth century and died in 1827, is indebted to Comenius for the fundamental ideas and, to a great degree, for the methods which he organized in primary education. And thousands of educators since Bacon's time, though, perhaps, not formulating their methods, have wrought in the spirit of these great leaders of edu cational progress; and we judge that many have been so true to nature, and so in sympathy with the little ones, to whom they were both teacher and companion, that they were as unconscious of the life and warmth that flowed from them as the sun is of his shining, or the dear mother earth of the plant that she nourishes into

life and beauty and fruitfulness.

Chief among the defects that have attended the modern experience of object-teaching, which we shall simply refer to, without enlarging upon them, may be mentioned:

1. That too frequently it has been put forward preten tiously by those who, either from want of skill or with too narrow an apprehension of its true significance, have caught the form and missed the spirit—so that the dry inspire others with his feelings. He can neither resist bones of a dead formalism have taken the place of that temptation nor lead others away from it. The decided living inspiration that should meet response in the active, strong man, and he only, can so act and impress himself aggressive, and inquiring mind of childhood.

2. Many, also, it is to be feared, who have little genius

for the work of instruction, never translate into their own experience and vitalize the ideas-elementary and sugges-

or the training schools.

3. The average American child, by methods of his own, in the daily experience of the home and the street, gains ing rigidity, or obstinacy, or pugnacity. Consider the a knowledge of things that, in most respects, put him in structure of the literal backbone. It is strong, but it is

eyes is far enough from their thoughts; whereas we termined by the teacher from her own consciousness, and should fix the eyes of our mind upon things themselves, and thereby form a true conception of them."

Unquestionably the great founder of the inductive repetition of scientific or difficult terms and seduced into philosophy gave inspiration to the labors of Comenius, the giving of a definition that, for any vital relation to

5. The spirit of the maxim, "first form the mind and then furnish it," has been perverted and so interpreted as to give currency to a false philosophy, and to most erroneous and unfruitful practices. The mind is "formed" by the process of furnishing it; and it behooves all who have been led astray by this aphorism to consider that the real defect in our education is the meagerness of our knowledge of facts, more than of power to express what we know or to use what we have acquired.

There is a golden mean, and the "improved methods" are in danger, while contemning the errors of the "memoriter system," of going themselves to the other

"Gradgrind" may be amenable to censure, but he has

received unmerited abuse.

The true use of Pestalozzian principles is to correct, not to overturn and destroy. It way be found that the evils which have been charged against the several schools of pedagogy arise from error in practice and false interpretation of principles, and that after all there are not so wide differences in the fundamental ideas as some have claimed .- (Brooklyn Journal of Education.)

## Educational Backbone.

PROF. E. BARTON WOOD.

(Paper read before the Wisconsin State Teachers' Association, July 30, 1875.)

There is no grander thing in all the universe than a strong, decided, self-reliant, independent character. Strength of will, decision of purpose, independence of action and thought,-these form the lever that moves the world. Without these, all other traits are of little worth to their possessor or to the world about him. The weak man, no matter how good his purpose, is a cipher. He can not carry out his plans, nor can he inspire others with his feelings. He can neither resist upon his time as to effect any important thing for the race. We have plenty of weak, good men. We need more of those who dare stand up for their opinions. who in fact have opinions, and who can be swerved tive at best-which they have received from the manuals neither by threats nor cajolery from their true course men, in other words, of backbone.

Backbone does not mean, as I understand it, unbenda knowledge of imags mat, in most respects, put mm in advance of the school lessons, often manufactured as if the teacher or the book-maker supposed his mind to be still a blank; and so in this and other respects "Pestalozzian methods" have violated Pestalozzian principles.

4. Particularly, whilst it is accepted that "observation is the absolute basis of all knowledge; that the first object in education must be to lead the child to observe with