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problems and interests of life to children always before considered dull. Those well qualified to express an opinion contend that the work has an ethical value in that it puts the child in the place of other people whose rights he has not appreciated before, and hence has failed to respect. suggestion to a child that he may grow a tree of his own will give him a desire to do so. Some real knowledge of the amount of care, time, patience, and money, and of the chance of success or failure in raising the tree will, it is asserted, do more in getting a child voluntarily to respect public parks and gardens than all the police which a city can afford to place or watch over them. Referring to the esthetic side of the work, it is contended that many country children, too young to feel the effect of more bushels of potatoes or more pounds of wool, have early formed their dislike for the farm, and that a flower-garden or pleasant yard would do more to content them with living on a farm than ten bushels more of wheat to the acre.

Dealing with the practical advantages of agricultural education in a bulletin recently issued by the Bureau of Education, Washington, Mr. J. R. Jewell says,—

"A proper correlation of agriculture with the other studies would furnish plenty of material for school use which would mean more to the children than would text-books, especially in arith-

metic, composition, &c.
"Most of the pupils in our rural schools have but two sources of information—namely, the world around them and books. It is sad to think how little many of them get from either. Nature-study in the earlier years teaches the child to observe, inference gradually comes in as he combines his observations, until in the higher grades he reasons from cause to effect. within the last two decades the education of our schools was confined to thinking, the doing was limited to work with pen or pencil. Manual training is now recognised as of great educational value, but the impossibility of suitable equipment for wood, clay, and iron working prevents our rural schools from attaining to the efficiency of our city schools. School gardens make good this deficiency, and furnish the first opportunity for co-ordination between mental and motor activity. As the child grows and his interest enlarges he should be given larger opportunities for determining, guiding, exercising, and controlling his motor activities. There is almost as much need of nature-study with an agricultural trend, of school gardens, and of agricultural instruction, in many of our city schools as in the country. Before the introduction of manual training our educational system had made no provision for those pupils of a distinctly motor type. them are now being lifted to a higher plane of life than before; and the introduction of gardening into the schools of cities of considerable size has saved a large number of others from dropping out of school without any broad life-interest, and with but a small part of what the school should give them. There are, moreover, in the schools of all our cities, surrounded by farming or horticultural industries, a considerable number of children who must eventually gain their livelihood in such work, to say nothing of the pupils from rural communities who come into the urban schools because of their superior advantages. Certainly, if the aim of education is to fit for life, these boys and girls should be taught according to their needs and not along some hard and fast course of study mapped out for those who wish to prepare for college. A large number of our cities now have manual-training high schools for children needing such training as they give, and

it is right that it should be so.

"There is even more justification for the teaching of scientific agriculture, since it would probably tend to check the congestion of our cities, while the former has exactly the opposite trend. One extra teacher in a high school could give instruction in agriculture, open as part of an elective course for those who cared for it, along with most of the other scientific subjects, but with

"It has not been possible to consider the need of a good agricultural education for the children of rural communities without touching, at almost every point, some argument for the educational value of agriculture. Before formal schools were thought of, the race made its progress by studying nature and by manual training; later the school came in to supplement these and finally usurped their place, absorbing all the time of the pupil in the consideration of books. Every race has dug its civilisation out of the ground; the boys are doing the same thing, successfully, in a number of our American schools. It is time for us to ask again, with Demolins, 'Do our schools make men?' Are they helping to maintain the superiority of the Anglo-Saxon? have long believed that the painter, the designer, and the sculptor express the highest form of thought in their handiwork. Lately we have accepted working in clay, wood, and iron as true expressions of thought. In the same way exact and well-ordered thought is required in the problems of the farm, in bringing the various kinds of soil to the maximum of productivity, and in the handling of the complicated machinery at hand. Indeed, the value of elementary agriculture in the common schools is now recognised almost all over our country, and each year sees its introduction into one or more States. It is natural that this should be so long before there is much agitation for agriculture in our high schools, because a professionally trained teacher is not absolutely necessary in the elementary school to make the instruction valuable. Perhaps it is wise to have such a study as this, in which the pupils may know as much as, or more than, their teacher, who shall study with them, only using his larger powers for the skilful guidance of the children. To make a success of school gardens without having had experience in gardening is more difficult than with nature-study, but with foresight and pertinacity it can be done. In those States where the law has made such instruction mandatory upon elementary teachers, there are hundreds of cases where teachers have made a success of teaching elementary agriculture, although practically not at all trained for the work. But in the secondary schools this is im-There must be trained teachers in those schools to assure scientific instruction.

"A last argument, but by no means the least, for the educational value of agriculture in our schools is that in France and Belgium its introduction has materially raised the age of leaving