

would consider, under all circumstances, the interests of the school as being the most essential thing, and the revenue of the land as an element very accessory, and that ought to be found in every establishment for education.

From this false position proceeds again, the distance of agricultural academies from establishments for general instruction, which have almost entirely excluded from them instructions in natural history; and that has hindered them from participating in the extraordinary advancement made in the science of nature since the time of Thær. One can scarcely picture to himself the difference which exists between the manner in which the most simple things were taught in those schools and the present state of scientific knowledge. We ought not, then, to be shocked to see the simplicity with which certain leaders of agriculture exhausted themselves, to show that the culture of the fields is not subject to the laws of nature, and that practice is a thing altogether separate—entirely different from head-knowledge, or that which is called "theory."

The men who entitle themselves "practitioner" have put forward, with immoderate enthusiasm, practice to the diminution of science. As long as the conquests of science extended over a limited circle, they passed unperceived; but as soon as its importance increased, it was incapable of appropriating them to itself. Then the right-thinking amongst the practical men acknowledged that the old way was insufficient, and that it had become necessary to open a new one for the advancement of progress.

At this time all the agricultural colleges have completely lost their importance, and if they are supported they will become the asylums of a number of professors who have forced themselves into a position which they are quite incapable of filling honestly; which is interdicted to them by the absence of the necessary faculties, and by failing of the acquirements they profess to teach. Indeed, a great number of men, who are incapable of finding the theoretical solution of the most simple problem put into practice, promise to us agriculturists to solve the most complicated questions of vegetable physiology and culture, by means of a recipe for the composition of a manure. Agriculture is a new country that science has to conquer, and which, when it comes to discover a new land, begins by falling into the hands of adventurers and swindlers. It is only recently that the true cultivators have arisen, who, by the sweat of their brow, have succeeded in the development of the natural riches of the country, and in drawing from it a portion of its resources. The period at which this transformation in agriculture will take place, is no longer at a remote distance, for we begin to comprehend that the agriculture of our times must renounce its prejudices, in virtue of which we thought it possible to succeed in husbandry with a less amount

of science than in all the other professions. The agriculturist sees that he must renounce the vague *perhaps*; that is to say, he cannot proceed in rational practice without possessing true knowledge and acquirements; that he need not fear compromising the results of his efforts and meditations by appropriating to himself what wise and experimental men have found by reflection, which they have left for the good of humanity; in fact that he ought not to be treated, in the lessons which are given him, as a child whom one makes to sit at a small table, and for whom one cuts small pieces for fear he should be choked by swallowing large pieces too quickly.

The golden age of equality in ignorance is past for agriculture; and we already see making its appearance amongst them a species of hierarchism, according to the state of their minds and the amount of knowledge they have acquired. Science is the force that conquers capital, and, consequently, power; it chases then, naturally and infallibly, the son from the heritage of his father.

The agriculturist or manufacturer who uses his eyes must certainly see that he lives in a cruel age, regardless of persons, which renders more and more difficult the subsistence of a man ignorant, incapable, or weak, and that in the generation following it will be altogether impossible. He must understand that he ought always to learn more; that in no period can he live quietly, or avoid taking part in the determined struggle of competition, and that all protection that hinders him from employing his forces and development only hastens his ruin.

The agriculturists' education would not have been directed for a long time in a different manner from that of other professions, if, instead of interfering in their affairs by the protection of schools of agriculture, the students had been left to seek their own means of instruction. It was, therefore, tacitly acknowledged that the agricultural student was uncultivated, ignorant, without education; that he needed particular means of instruction; and that academies of agriculture were calculated to hinder him from rising to a superior position. In our schools of commerce and manufacture (which did not exist in the time of Thær) the agricultural student may acquire a much deeper knowledge of mathematics and natural history than by following the course of the academies of agronomy; as it teaches no political economy, nor chemistry, natural philosophy, nor even the science of botany, which is particularly useful to the agriculturist. The union of establishments, specially for their instruction, to the universities, is the most powerful means of supplying the wants of the agriculturists. Roscher considered that reunion as being much more important than an affiliation to a model establishment. If we enquire into the real state of these agricultural academies, we find they possessed a most miser-