

### Education in the New Era.

IN addresses given in Leeds last February Mr. F. W. Sanderson, headmaster of Oundle School, very boldly faces the root of the evil in existing educational systems as it is felt in the school, and advocates radical reconstruction upon new lines. His view is that schools should be altruistic in their aims and methods and be based on service and co-operation rather than on competition. They exist solely to aid and enrich the life of the people. Traditional methods based upon public-school models accentuate the anti-social spirit of competition and damp down co-operation, whereas the schools of the country ought to be the source from which the transfiguring and transforming spirit of the age is breathed through the thoughts of men. A school is a microcosm, and its subject-matter is to be found, not in books, but in the world around it, of which it itself should be an idealised model upon a small scale. It should concern itself with the tragedies of undeveloped talent, the slow decay of the faculties of masses of men caused by their employment in industry, and the sullen mental stupor that, after the violent revolutionary period of youth, brings peace on an animal level. For the schools are concerned with similar problems. The elevation of the submerged, the bringing back into the stream of school-life of the weak, and the raising of the general average are even more important there than the provision of the fullest opportunity for talent and ability. So is it in the national life. We are presented with a vision of spacious halls and galleries, workshops, laboratories, gardens and fields, art-rooms, libraries, and museums for children to learn in instead of in stuffy class-rooms, by doing, making, inquiring, and co-operating rather than by the preparation for interminable examinations, which suit better those of the possessive and dominating order, of whom the world is growing so tired.

The policy of leaving dull, bread-winning drudgery unredeemed in the state it is, and concentrating upon the cultivation of the artistic and literary faculties of the workers in enlarged periods of leisure, can only have the effect of making the real work even more impossible. In spite of the cold douche of authority, we are told; in spite of the attitude of labour-leaders, once bit twice shy; and in spite of the enthusiasm ever seeking a new rallying ground for lost causes, workers, when they are left to themselves to plan their own scheme of salvation, choose for their education vocational and technical work. The average man glories in his daily work and trade so long as his heart is kept in it by his being treated as a human being rather than as a machine. In the spirit of craftsmanship, better than in medieval and drawing-room studies, is to be found the remedy for the evils of industrialism.

Science, the gift of the age, notwithstanding its repercussion upon the foundations of society, has not yet penetrated appreciably into our institutions of governance and education. It is the bed-rock upon which all future educational ideals must be based, and the new creative spirit it has reincarnated in the world—its spirit of inquiry for the love of truth for its own sake and its spirit of co-operation with others engaged in the same work—is that by which the age must outgrow the nightmare which the old spirit has made of it and the world. Scientific thought and research must be applied to creating new wine-skins rather than more new wine until this is put right. It has demolished the cobwebs of traditional economics and finance and substituted for them fundamental conceptions of the laws by which men live and move and have their being. It meets no

opposition, and scarcely even discussion, now from the professional exponents of the merits of the existing régime. Were it not for private interests and the ignorance of its ruling classes science would not have any difficulty in restarting the world on saner lines.

What is especially remarkable about this is that it is no vision of a dreamer, "sicklied o'er with the pale cast of thought," but rather that of a practical public-school headmaster, who has burst open the prison-doors of the pedagogic strongholds of the past and reclaimed for the schools the right and duty of serving and studying their own age. If there were ten such men, haply they might yet be in time.

This picture from a schoolmaster of what could be done in the school opens out broader visions of what universities might accomplish. They are in the most extraordinary case. They can claim that they have given in the research ideal of science—the finding out of the fundamentally new, *not* the mere rediscovery of the old that has been lost—the creative agency by which alone the modern world is great or even distinguished. But it has been done in the teeth of official apathy and discouragement. On the other side of the balance sheet is the traditional education they continue to give to the ruling classes, training them to be impervious to new knowledge and able only to find in the old and dead past ideals for imitation and reverence. These ideals and maxims have set the producers of wealth of the modern world at one another's throats for the benefit of its wasters. The code of laws remains as in olden time, though its obvious result has been to turn to debt the increase in the wealth of the community which the labours of scientific investigators have made possible. The world despises such results and wants something more from its old universities than that they should be beggars for their existence for crumbs from the tables that its own schools of science have loaded with gifts. It looks to them for a clear enunciation of the first right of the community to the produce of its own labours, which the law allows by taxation, for the upbringing of its own youth and for the cultivation of its creative institutions where knowledge is made and disseminated. The claim of the user upon that produce is secondary both by law and by common sense. And, lest again the stability of the world be endangered by its rulers being educated on myth and verbal subtleties to the total exclusion of the laws that appertain equally to Nature and to life, let them in the spirit of Plato inscribe over their reformed portals:—

"Let no one enter who is destitute of science."

FREDERICK SODDY.

### British Aeronautics.<sup>1</sup>

THE Report of the Advisory Committee for Aeronautics for the year 1918-19 is an interesting record of work achieved, which acquires additional interest by including a general review of progress made since the beginning of the war. More than ever, after reading it, one is impressed by the range and extent of the demands which this new industry has made upon existing knowledge; of the structural engineer it requires that its stress calculations and the testing of its materials shall be conducted with an accuracy never contemplated before; of the mechanical engineer, that its engines shall be economical both of material and of fuel to a degree which until very recently would have seemed almost

<sup>1</sup> "Aeronautics." Report of the Advisory Committee for Aeronautics for the Year 1918-19. Pp. 77. (London: H.M. Stationery Office, 1920.) Cmd. 488. Price 4d. net.