

The lowering of the mental standard, which results from the extreme division of labour, extends to those who are to instruct others. "The mind of a man becomes inevitably shrunken," says Stuart Mill, "and he loses all interest in the great ends of humanity, when all his thoughts turn to the classification of a small number of insects, or to the resolving of a few equations, just as much as if he were employed in manufacturing the points or the heads of pins." Specialism, inclined to separate each study from all others, is the fault of too many of our *savants*, who, contrary to their interests, have a decided aversion to large philosophic views. The specialities which receive their entire attention, the wheels, infinitesimally small, which they are employed in turning in the great social machine, prevent them from having the sentiment of a complete unity, or even of the unity of one science with others. Yet it is this sentiment which constitutes public opinion. Hence their work becomes "a simple tribute to material necessity" instead of being the happy fulfilling of a social duty.

Our system of education is no more in keeping with the positivist conception than with the idealistic. Auguste Comte says: "The first and essential condition of positive education, intellectual as well as moral, ought to consist in a vigorous universality." He expressly desires "an education capable of varied extension, but according to a system always identical and equal." What is universal in the sciences is, according to him, to be found in their spirit, in their methods and their great results; this is the positive ground-work of scientific education, and so Auguste Comte saw, in the specialism of studies, one of the greatest and most growing evils which are retarding a moral and intellectual renaissance in France, and he held that all the forces of society ought to be employed in opposing such a direction being given to our intellectual forces. There is but one remedy for this evil, and it is in an education at once broad and general, and at the same time unified, and which may serve as the common ground-work for ulterior specialities.

"CANST THOU GUIDE ARCTURUS?"

BY E. W. MAUNDER.

A FEW months ago the Astronomer Royal announced to the Royal Astronomical Society, of which he was then the President, that a new catalogue of stars had just been published at the Royal Observatory, Greenwich; not the first by any means which has been issued from that institution, for it is a most important part of the regular duty of its chief to prepare such catalogues at convenient intervals of time.

It does not seem likely at the first glance that there could be anything

in such a publication of interest to any but a professional astronomer. And yet there can be no doubt that it is only our ignorance which hinders us from seeing a wonder and a romance on every page, for every line is the register of a sun; a sun in many cases larger than our own, and most, if not all, of which are probably the centres of systems of planets not less beautiful and complex than that of which our world is a member.

We judge that it must be so, for in