fessor may achieve! But the experiment usually serves only to continue through four years further a task which a brief glance through the school pedigree would have shown to be hopeless against hope. Education must in some way have its basis of selection and differentiation no less efficient than has been that of organic nature. One of the most hopeful of these means, so far as the writer can perceive, is through what may be designated as educational eugenics, the application of the principles of eugenics to problems of mind to the function of the schools, and pre-eminently to the college and university, in the same general way through which we are presuming to secure better social and racial germ plasms.

Assuming what is now generally conceded, that all human characteristics are inherited in probably equal degree, and this must include mental traits and aptitudes, then it is not utopian to anticipate the existence of potentialities of intellect which it may be possible to distinguish early in development, if indeed they may not be predicted on some basis such as Mendelism, and which may serve as an index of fitness for or against prospective scholastic eminence of such nature as to warrant encouragement or inhibition, as the case may be. This does not imply that all educational effort need be intercepted; to the contrary, it means rather differentiation of aims and methods. One may give no promise whatever of fitness for distinctively literary or scientific or pedagogical education, yet may be safely directed toward technical, vocational or industrial education. In other words, our program, like that of eugenics in general, should be selective in both a positive and a negative sense; fitness should be sought and fostered in every reasonable way, while the unfit should be deflected or diverted into avenues in which some outlook may prompt specialized training adapted to such betterment as may be within realization.

Let me close as I began, with a call for ampler and more critical vital statistics. They are needed in almost every phase of our complex modern social and civil life. They can be made contributory to health, to moral and social conservation, and, as it seems to me, to educational progress toward a degree of efficiency and excellence for which it will no longer be necessary to apologize or explain.

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To Trace the Lines of Force in an Electrostatic Field

Mr. R. F. D'Arcy describes an arrangement for tracing the lines of force of an electrostatic field in *Nature,* of March 20. Mr. D'Arcy's method is to support a metal ball at the top of a tall glass tube standing upon a float in a tray of mercury. Then, according to Mr. D'Arcy, the insulated ball follows the horizontal lines of force of the electric field between the properly placed terminals of a large electric machine.

Another method for tracing the lines of force in an electric field is described by Mr. B. M. Neville in *Nature* of April 3. Mr. Neville simply allows a scrap of cotton-wool to fall between the knobs of an electric machine. As soon as the bit of cotton-wool touches one of the terminals it becomes charged and moves off rapidly along a line of force.

The most satisfactory method known to the writer for tracing the lines of force in an electrostatic field is to suspend a toothpick by fine thread from the end of a long handle. When placed in the electric field the suspended toothpick behaves exactly like a compass in a magnetic field, and points in the direction of the field.

The method suggested by Mr. D'Arcy is open to the objection that an insulated metal ball does not, in general, tend to move along the lines of force in an electric field. The objection to Mr. Neville's arrangement is that the piece of cotton-wool moves too rapidly.

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The fact that an idea is a decade old is not necessarily a recommendation for it; but if it