

sense he needs no memorial; all English public schools in their present condition are monuments to the work of the greatest of the heads of public schools. No one made a deeper change in education—a change which profited those who were never at a public school. As much as any one who can be named, Arnold helped to form the standard of manly worth by which Englishmen judge and submit to be judged. A man of action himself, he sent out from Rugby men fit to do the work of the world. The virtues which his favorite Aristotle extolled—courage, justice, temperance—were his; and the influence of his character and teaching were calculated to make brave, high-minded soldiers, zealous, enlightened clergymen, lawyers with a just sense of the nature of their vocation, and, generally, useful and public-spirited members of the State. The width and range of his teaching are apt to be forgotten by those who dwelt on his personal influence. If he offered no large interpretation of life;

if in his writings there are rarely "thoughts beyond the reaches of the soul"; if as an historian he seems more at home in dealing with the geographical aspects of his subject or in clear delineation of the movements of events than in discerning the hidden springs of action; if he never or rarely lets fall some pregnant, unforgettable word, he had conceptions new in his time—first and foremost, his lofty conception of education; his conception of the Church as a great agency of social amelioration; his idea of each citizen's duty to the State; his view of history as a whole with no real division between ancient and modern; the interest, somewhat new in his time, which he felt in the elevation of the masses. One must have been at Rugby or Oxford in the thirties to appreciate the effect of Arnold's sermons and lectures on generous, susceptible youth. Even in the volume of national life as it flows today there may be detected the effect of the pure, fresh, bracing stream which long ago joined it.—*Times*.

GEOGRAPHY.

The agitation of a proposition to rename one of the boulevards of Paris after Pasteur has developed the fact that besides there being already a Rue Pasteur, 21 streets in Paris are named after chemists. Among the men thus remembered are Chevreul, Gay-Lussac, Lavoisier, Raspail, Davy, and Berzelius. Seven botanists are thus honored, one alchemist—Nicholas Flannel, of the 14th century—and 29 doctors and surgeons.—*Popular Science Monthly*.

We have been taught to believe that the beautiful iridescence of pearls and mother-of-pearl is caused by striations of fine grooves on the

surface of the nacre, just as the iris of a dove's neck is due to the striations of the plumage; but according to C. E. Benham, although a little of the color is produced in this way, most of it is caused by interference of the rays of light by reflection from the outer and inner surfaces of the thin layers of nacre forming the substance of the pearl. The colors of a pearl have therefore a similar origin to those of a soap bubble, or the iridescence of ancient glass which has been scaled by time.—*Cassell's Magazine*.

The *Scientific American* (New York) quotes from an exchange the