

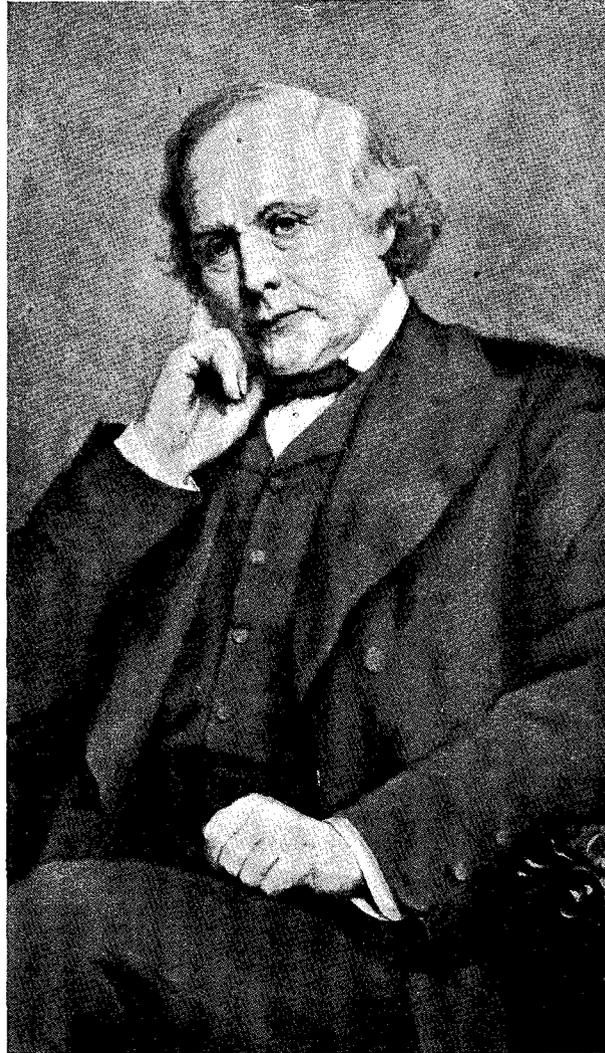


A SAVIOR OF SOCIETY

LORD LISTER, who was born plain Joseph Lister, in 1827, but was raised to the peerage in 1897 for his eminent services to surgery, died in England on February 11. Lister, who has been called the founder of modern surgery, is justly regarded as one of the great benefactors of the human race. By his discovery of antiseptic surgery he made possible operations that were considered impossible under the old procedure, and he rendered perfectly safe many methods that were thought to be dangerous final resorts. This he did by recognizing that in nine cases out of ten danger to the patient resulted not from the mechanical features of the operation, but from subsequent infection by bacteria. By disinfecting wound, instruments, bandages, and everything connected with the operation, he killed the germs and obviated the unpleasant or even fatal consequences once so inevitable. More recent procedure has been aseptic rather than antiseptic; that is, care is taken to exclude germs by scrupulous cleanliness rather than to poison them when they have gained a footing. But any procedure of this kind must rest upon Lister's original discovery, and he is justly entitled to gratitude as a physical savior of society. In his new work on "Surgery and Society" (London, 1912), Dr. C. W. Saleeby devotes a majority of his seventeen chapters to Listerism and its effects on modern life. Surgery as it was before Lister, says Dr. Saleeby, was the prey of microbes. With Lister's "intervention," as he terms it, it became possible to repel their attacks. He thus ends his chapter entitled "Lister Intervenes":

"There is no pen, nor ever was, nor will be, that could do justice or a tithe of a tithe of justice to the meaning of that historic moment in the history of mankind when the slowly but surely seminal labors of the appointed in many past generations, hitherto unavailing, jeered at by fools, unknown by the crowd, trivial in the eyes of kings, culminated for the saving of fools and crowds and kings alike, in Listerian surgery."

The labors of Lister, the writer goes on to say, in succeeding chapters, have borne fruit in alleviating the pains and dangers of motherhood, in greatly lessening the mortality in war, and in advancing and aiding the surgeon's work for the good of society at every point. There is only one more step, Dr. Saleeby thinks: the blessings of modern surgery must be made available to every person in the community. We are apt to think that with our free hospitals and dispensaries and our instruction in "first aid to the injured," this has been already done, but our writer undeceives us. He says:



LORD LISTER.

FROM A PAINTING BY W. W. OULESS, R.A.

"He saved more lives than Napoleon took in all his wars."

"That this magnificent provision should be made for the poorest does honor to our civilization as do very few of its more boasted triumphs. But it has many unsatisfactory features. In the first place, the provision is inadequate. There are not enough beds and theaters for all the patients who need expert surgical help; nor can there be so long as the economic basis of the hospital service remains what it is, and the causes of disease demanding surgical interference persist. Much more important, however, is the fact that it is entirely left to the ignorant, uninstructed, or disgracefully misdirected and suspicious poor to consult the surgeon. Popular education has given them no guidance in such matters, neither as to significant symptoms, nor as to the beneficence of surgery, nor as to the conduct of hospitals, nor as to the importance of taking disease in time. The fashion in which the poor neglect their teeth is a simple and typical illustration. Thus it follows that the finest surgical skill in the world, the most generous provision of superb theaters on the part of philanthropic donors, and the whole apparatus of a modern hospital are constantly set to hopeless, futile, or semifutile tasks, being robbed of all or half their efficacy because they are not employed in time.

"This point is tragically familiar to all who have any hospital experience, in such common cases as cancer and surgical tuberculosis, where time is of the essence of the problem; and when we remember how often the poor are misinformed—as by the antivivisectionists—and decline to avail themselves of the surgeon's help even when they have consulted him, we shall realize that not even the provision of skill and service and everything else suffices without some kind of machinery acting outside the hospitals.

"That machinery will in a large measure be provided in Great Britain by the system of national insurance. The greater part of the patients who belong to the class now under discussion will be so insured that they have a doctor

to consult even for merely suspicious or inconvenient symptoms. Instead of waiting until the symptoms become intolerable they will consult a doctor at once, just like the well-to-do. I, therefore, anticipate, as one immediate result of national insurance against illness, a great increase in the proportion of patients whom hospital surgeons see in time. But only surgeons themselves can adequately estimate the value to their patients and the satisfaction to themselves of such a change, which will mean that much of their skill and labor, now thrown away because deprived of a fair chance, will be made really available for life and for health.

"An immediate, tho for the best of reasons by no means a lasting, result of the establishment of a system of national insurance must therefore be a considerable increase in the pressure upon the surgical wards and theaters of hospitals—an increase which must hasten the inevitable change in the economic basis of these institutions. That this change is indeed inevitable we shall realize when we proceed to consider the provision of Listerism for the great middle class, which can

neither afford the fees of the best surgeons, nor bring itself to enter the hospitals, even if patients of this class were expected there.

"As every one knows very well, surgical provision for this class does not exist. Even the consultation fees of two guineas for a first, and one for subsequent visits are a serious matter, but the expense of an operation, together with nursing and incidentals, is ruinous. What the poor may get for nothing would cost the middle-class man perhaps two hundred pounds, which may be a year's income—say of a curate or clerk or what not."

Thus the poor are too many for us to help by our present methods, and the man with the moderate income can not afford to employ them; so that the benefits of Listerism, great as they are, are withheld from thousands. "The Promise of the Future," as Saleeby calls it in the title of his concluding chapter, is, in fact, the intervention of the state in all phases of the public health. The extension of Lister's method, from the killing of a few germs in the immediate neighborhood of a wound to the world-wide extinction of all germs, which means the abolition of all disease, is the goal to which he looks forward. For such a comprehensive war as this we must necessarily have state action. Dr. Saleeby would have governments turn themselves into vast boards of health and the conflict inaugurated by Lister on a small scale pursued far and wide until society, on its physical side, is saved effectively by the methods of the great English surgeon who has just passed away.

MARRIAGE AS AN EXPERIMENT

FROM THE STANDPOINT of biology and eugenics, marriage is a scientific experiment whose results are tested by the character of its offspring. So we are told by Charles B. Davenport, of the Carnegie Institution of Washington, in his book on "Heredity in Relation to Eugenics" (New York, 1911). Mr. Davenport is stating this as a fact, and is not giving it his approval. That marriage should still be only an *experiment* in breeding, while the breeding of many animals and plants has been reduced to a science, he considers ground for reproach. The human product is certainly superior to that of poultry; and as we may now predict with precision the characters of the offspring of a particular pair of pedigreed fowls, so, Mr. Davenport thinks, may it sometime be with human beings. As we now know how to make almost any desired combination of the characters of guinea-pigs, chickens, wheats, and cottons, so, he ventures to hope, we may one day do with man. He goes on to say:

"At present, matings, even among cultured people, seem to be made at haphazard. Nevertheless there is some evidence of a crude selection in peoples of all stations. Even savages have a strong sense of personal beauty, and a selection of marriage mates is influenced by this fact, as Darwin has shown. It is, indeed, for the purpose of adding to their personal attractiveness that savage women or men tattoo the skin, bind up various parts of the body, including the feet, and insert ornaments into lips, nose, and ears. Among civilized peoples personal beauty still plays a part in selective mating. . . . Even a selection on the ground of social position and wealth has a rough eugenic value, since success means the presence of certain effective traits in the stock. The general idea of marrying health, wealth, and wisdom is a rough eugenic ideal. A curious antipathy is that of red-haired persons of opposite sex for each other. Among thousands of matings that I have considered I have found only two cases where both husband and wife are red-headed, and I am assured by red-haired persons that the antipathy exists. If, as is sometimes alleged, red hair is frequently associated with a condition of nervous irritability this is a eugenic antipathy.

"In so far as young men and women are left free to select their own marriage mates the widest possible acquaintance with different sorts of people, to increase the amplitude of selection, is evidently desirable. This is the great argument for coeducation of the sexes, both at school and college, that they may increase the range of their experience with people and gain more

discrimination in selection. The custom that prevails in America and England of free selection of mates makes the more necessary the proper instruction of young people in the principles of eugenic matings.

"The theory of independent unit characters has an important bearing upon our classifications of human beings and shows how essentially vague and even false in conception these classifications are. A large part of the time and expense of maintaining the courts is due to this antiquated classification, with its tacit assumption that each class stands as a type of men. Note the extended discussions in courts as to whether A belongs to the white race or to the black race, or whether B is feeble-minded or not. Usually they avoid, as if by intention, the fundamental question of definition, and if experts be called in to give a definition the situation is rendered only worse. Thus one expert will define a feeble-minded person as one incapable of protecting his life against the ordinary hazards of civilization, but this is very vague, and the test is constantly changing. For a person may be quick-witted enough to avoid being run over by a horse and carriage, but not quick enough to escape an automobile. . . . Every attempt to classify persons into a limited number of mental categories ends unsatisfactorily.

"The facts seem to be rather that no person possesses all of the thousands of unit traits that are possible, and that are known in the species. Some of these traits we are better off without, but the lack of others is a serious handicap. If we place in the feeble-minded class every person who lacks any known mental trait we extend it to include practically all persons. If we place there only those who lack some trait desirable in social life, again our class is too inclusive. Perhaps the best definition would be: 'deficient in some socially important trait,' and then the class would include (as perhaps it should) also the sexually immoral, the criminalistic, those who can not control their use of narcotics, those who habitually tell lies by preference, and those who run away from school or home."

It is by studying traits and their inheritability and combining them in the two parents in desired proportions that the writer believes we shall raise marriage in the future from an experiment into something better. We must remember, however, that he is speaking solely from the biological standpoint. There are other standpoints from which other persons regard it, and these will doubtless interfere with the consummation so devoutly wished by Mr. Davenport.

THE QUALITIES OF LEADERSHIP

IT IS COMING more and more to be recognized that a leader is born, not made. The lad who leads his fellows does so by virtue of certain qualities that they recognize in him; and these will be apt to make him a leader of men in after-life, whether in politics, education, or industry. In *Bailey's Magazine*, an English publication devoted to sports and pastimes, Dr. Claye Shaw, in an article on "Temperament in Sport," asserts that the qualities that make a man a leader in cricket or football tend to make him a good man for other "jobs." Successful leadership, he points out, does not always connote perfection in mechanical detail, altho it implies an accurate knowledge of what is wanted at the moment and a balanced judgment of the way by which it is to be attained. Plenty react to the spur of a leader of genius who are useless if called upon to apply such a stimulus to others. To quote *The British Medical Journal* (London, January 20), which prints a review and appreciation of Dr. Shaw's article:

"This is illustrated very notably in the case of Napoleon's marshals, all of whom were men of tried experience in war, and with aptitudes developed in various directions in that field. Most of them, however, did not show to their best advantage when in independent command. It is not an easy thing to decide as to the qualities which fit a man for leadership. He must be tried, and too many thus tried would come under the verdict of Tacitus: *Capax imperii nisi imperasset*. Dr. Shaw goes on to say that the foremost man of a revolution may be the right person to lead his enthusiastic followers to victory, but he may not be the one to keep them together afterward.