The American Association for the Advancement of Science*

The Application of Science to the Practice of Medicine*

The practice of medicine is generally described by that time-worn phrase as being an art and a science. This definition infers that although the practice of medicine is an applied science, there is something beyond the realm of science that is needed in the discharge of the functions of the physician in his relation to his patients. Every one is ready to concede that this is true, but there is no clearly defined idea as to where science leaves off and where art begins, nor have the terms science and art as applied to medical practice received an exact definition.

Professor John Dewey† has written:

Just in the degree in which a physician is an artist in his work he uses his science, no matter how extensive and accurate, to furnish him with tools of inquiry into the individual case, and with methods of forecasting a method of dealing with it. Just in the degree in which, no matter how great his learning, he subordinates the individual case to some classification of diseases and some generic rule of treatment, he sinks to the level of the routine mechanic. His intelligence and his action become rigid, dogmatic, instead of free and flexible.

Professor Dewey presents the idea that it is the accurate and discerning application of science to meet the needs of the individual patient that constitutes the art of medicine.

There seems to be, however, another meaning to the phrase “art of medicine,” which is associated with the so-called force of personality, knowledge of human nature and prestige by which a physician is often able to persuade or command or influence or even mislead a patient into a better state of health and comfort. The enormous following given to “healers” who make no use of the application of science in its usual sense testifies to the fact that human needs may at the present time be satisfied by systems of practice that have no basis in the natural sciences. Every intelligent person, however, recognizes the fact that although science is not related to many of the

* Address of the president and vice-president of Section N—Medical Sciences—American Association for the Advancement of Science, New York, December, 1928, p. 168, New York, 1929.
