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THE CAUSATION OF THE HEART-BEAT AND OTHER PROBLEMS IN CARDIAC PHYSIOLOGY.

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Until very recently, nearly all investigations on the physiology of the heart were made on mammals. This was the case even in scientific Germany, and is explicable by the fact pointed out by Professor Carl Semper, that physiologists being mostly connected with the medical faculties of the universities were led to regard the chief, if not the sole purpose of physiological study to be the advancement of clinical medicine; consequently their investigations were confined to the mammalian heart, as the one most likely to throw light on the cardiac physiology of man. To this statement the heart of the frog is an exception. It has long been studied by physiologists in all countries; but even so late as six years ago very little was known of the hearts of other animals from the physiologist's point of view.

It has generally been found that science best ministers to man's material wants in the end if left free to develop itself, as science, totally independent of immediate practical application. It will in such case fall into the hands of the most competent and reliable investigators.

To commence the solution of cardiac problems with the most complex of all hearts—the mammalian—was a most unphilosophical proceeding, especially in this day of evolutionary light. If mammals have been derived from lower forms of life, it follows,