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## CONTENTS

|                                                                                                                                                                                                                                                                                                                                                                         |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <i>The Significance and Relationships of the Thomas Henry Simpson Memorial Institute for Medical Research:</i> DR. HENRY A. CHRISTIAN .....                                                                                                                                                                                                                             | 359 |
| <i>The Fortunate Failure of Philosophy:</i> PROFESSOR W. M. DAVIS .....                                                                                                                                                                                                                                                                                                 | 362 |
| <i>Edwin Theodore Dumble:</i> CHARLES LAURENCE BAKER .....                                                                                                                                                                                                                                                                                                              | 363 |
| <b>Scientific Events:</b>                                                                                                                                                                                                                                                                                                                                               |     |
| <i>The Benacheion Phytopathological Institute; Opening of the Institute of Optics in Paris; The Organization of British Scientific Workers; Annual Meeting of the American Geophysical Union</i> .....                                                                                                                                                                  | 364 |
| <i>Scientific Notes and News</i> .....                                                                                                                                                                                                                                                                                                                                  | 367 |
| <i>University and Educational Notes</i> .....                                                                                                                                                                                                                                                                                                                           | 371 |
| <b>Discussion and Correspondence:</b>                                                                                                                                                                                                                                                                                                                                   |     |
| <i>Abolition of the Bureau of Chemistry:</i> DR. HARVEY W. WILEY. <i>10,800,000 Vaccinations for Smallpox without One Single Reported Case of Syphilis:</i> SURGEON GENERALS M. W. IRELAND, E. R. STITT and H. S. CUMMING. <i>Facts and Theories in Geology:</i> PROFESSOR GEORGE MCCREADY PRICE. <i>Long Range Weather Forecasts:</i> PROFESSOR ALEXANDER MCADIE ..... | 371 |
| <b>Scientific Books:</b>                                                                                                                                                                                                                                                                                                                                                |     |
| <i>Tillyard on the Insects of Australia and New Zealand:</i> PROFESSOR T. D. A. COCKERELL .....                                                                                                                                                                                                                                                                         | 374 |
| <b>Scientific Apparatus and Laboratory Methods:</b>                                                                                                                                                                                                                                                                                                                     |     |
| <i>Rapid Determination of Soil Moisture by Alcohol:</i> G. J. BOUYOUCOS .....                                                                                                                                                                                                                                                                                           | 375 |
| <b>Special Articles:</b>                                                                                                                                                                                                                                                                                                                                                |     |
| <i>The Askenasy Demonstration of Traction transmitted through Liquid Water:</i> DR. BURTON E. LIVINGSTON and GRACE LUBIN. <i>Simple Seismic Measurements:</i> DR. PAUL KIRKPATRICK .....                                                                                                                                                                                | 376 |
| <i>Science News</i> .....                                                                                                                                                                                                                                                                                                                                               | x   |

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## THE SIGNIFICANCE AND RELATIONSHIPS OF THE THOMAS HENRY SIMPSON MEMORIAL INSTITUTE FOR MEDICAL RESEARCH<sup>1</sup>

TO-DAY you have opened a research institute, dedicated to the study of an important and serious disease. May I not present to you some thoughts as to the significance and relationships of such an institute?

But first let me congratulate the faculty of medicine and the medical students of the University of Michigan on the possession of the Thomas Henry Simpson Memorial Institute for Medical Research, and the donor on the wisdom evinced by the form of her gift as a memorial to her late husband. To you, Mrs. Simpson, would I say that I feel certain that this gift will prove a source of real pleasure and great pride to you as you follow its work. However, the span of your life, and we trust it may be long, will be but a brief space of time in the life of the institution you have founded; as a memorial it will stand and be a productive institution for unnumbered years to come. Few, if any things, are more permanent than institutions of learning and hospitals. In history they have survived dynasties and peoples; their forms may change, but the spirit lives on; buildings crumble and fall, but the idea, embodied in the foundation, is immortal. So we may anticipate that, opening to-day, the Thomas Henry Simpson Memorial Institute for Medical Research will in some form last as long as does our civilization or a superior one.

Through all the ages there has been some form of quest to fire the zeal of man. In the days of chivalry such a quest was typified by the search for the Holy Grail,

"That so perchance the vision may be seen  
By thee and those, and all the world be heal'd."

A little later and the quest took the form of exploration and settlement of new lands. Now, with unexplored lands almost non-existent, the quest has shifted to investigation, the search for truth and the discovery of new facts. Investigation has become the Holy Grail of science, and the quest in this form stirs the imagination and fires the zeal of a new type of Sir Galahad, to

<sup>1</sup> An address delivered at the opening of the Institute, University of Michigan, February 10, 1927.

"Go forth, for thou shalt see what I have seen,  
And break thro all, till one will crown thee king  
Far in the spiritual city."

Pure, as typified by the search for the Holy Grail, is the purpose of this new institute for medical research. The results of work, done within these walls, will be given freely and without price to suffering humanity. As the Holy Grail was seen, but never attained by the knights of old, so the purpose of this institution will never be attained in the sense that its work can be said to have been finished. If within these walls the cause of pernicious anemia is discovered, and it is our hope that this may be the great good fortune of the Thomas Henry Simpson Memorial Institute for Medical Research, merely a larger vista for exploration will be opened. With cause known, prevention and cure more intelligently may be sought. If these are found, the scope of work at once enlarges to apply the knowledge, obtained in the study of pernicious anemia, to other related diseases that take their yearly toll of life and are causes of suffering and disability to human beings.

It is to be remembered that the by-products of investigation of a given disease often outweigh in importance and significance the solution of the main problem. Failure to solve the problem set is not a failure in the usefulness of the institute. Laws of fundamental importance to science may be discovered, whose value transcends any discovery connected with pernicious anemia. Methods, applicable in many relationships, may be evolved. Month by month and year by year young men are being trained and moulded by the struggle to solve the problems under investigation; these in later years become investigators prepared to solve other problems. All research institutes are educational institutions in the larger sense of the word.

This is not an isolated institution. Wisely it is part of a great university, intimately associated with a medical school of splendid traditions, in close juxtaposition and closely interdigitated in many ways with a commodious, well-organized hospital. This association is mutually helpful to all brought into this circle of contact; investigators, teachers, students, patients. Without such relationships the productivity of this research institute automatically would have been vastly curtailed. The related institutions furnish a soil in which the Thomas Henry Simpson Memorial Institute for Medical Research will flourish and have its fruition, and to this soil will pass out much that will greatly enrich it for other products. Progress, made anywhere within this group, starts an advance that will widen as the wave started in a still pond widens, and, like such a wave, which, as it touches a solid shore, is reflected back to initiate other waves,

will spread its influence beyond the circle of immediate contacts. Nor is such an influence long limited to the environs of this university. Methods of study, ways of treatment, perfected here, will, after a very brief interval, be tested elsewhere, and, if found of value, soon all the world will be using them, for science and the medical art know no geographical bounds of country or continent.

There is a side to a clinical research institute that distinguishes it from all other institutions of research. This concerns the relationship to patients, a relationship that must ever be in the forefront of the thoughts of the investigators in a clinical institute. In any properly organized clinical institute, though the problem under study may fail of solution, constantly a benefit is being brought to the patients within the institution. It is inconceivable that these patients should not have better care and their suffering be more ameliorated than similar patients anywhere else. That they should is now recognized as the first duty of every institute for clinical research. Fortunate then will be the patients that may come to this institute for study.

Patients guarantee such a research institute's being productive of good, even though the cause and cure of pernicious anemia are never found. At the same time their presence places limitations on what may be done. The director is first of all responsible for the welfare of these patients. Nothing can be tried that is likely to injure them; nothing must be done without their free consent. In every hospital, and a clinical research institute is a hospital, the best possible care of the patients is the first duty of the institution, and all else is secondary to this. In many experiments, desired combinations of conditions can be produced by the experimenter; with patients he must await the finding of the desired combination, as it has occurred independently of experiment. In this wise clinical research may be infinitely slower than other forms of investigation. To find the desired combination, great numbers of patients must be studied. For this the affiliated large university hospital is of the utmost importance and there must be no lack of cordial, prompt and complete cooperation between the two.

Any spirit of jealousy or antagonism between these related institutions will be fatal to progress in the investigations for which this institute has been founded. If such develop, they must be eradicated at once. A very considerable experience, as head of a medical clinic, has convinced me that men who allow personal jealousies and animosities to develop are so inherently small and narrow, so prejudicial to efficiency in team work, that, whatever their individual qualifications, the institution progresses best when

they sever connections with it. A large spirit of tolerance for native faults in others is needed by all to make for that happy community of interest that seems essential for the success of any institution. An institute for research should have no interest in claims of priority for ideas or discoveries; in fact, to my mind nothing is more futile than the not infrequent discussions as to priority of discovery that we hear; time always settles justly such questions, and discussion with claims and counter-claims but delay the fair verdict of time. Eventually each investigator is credited with his own small part in the discovery, and as a rule his credit is more than his deserts, for many contribute to all discoveries. Any problem worthy of investigation is large enough to give place for more than one investigator, even though each begins with the same ideas and uses the same methods. The genius who in isolation can solve important problems exists, but they are extremely rare. That an individual believes that he is such and should have special privileges of being disagreeable to his fellows is poor proof that he is such a rare genius and little reason for tolerating his eccentricities.

To those of you responsible in an administrative sense for this institute, let me say that wisely you should leave to the director, selected by you, all freedom in determining the policies and plans of the work within the terms of the gift. In selecting him you have given expression to confidence in his ability and his character. That you have not erred, I feel sure, by reason of a long and peculiarly intimate association with him, one that it gives me great regret to end. But I am glad for the great opportunity he is to have here at the University of Michigan. To make of this institute a success, to cooperate wisely in the development of the department of medicine of the medical school and of the University of Michigan is truly a great opportunity.

Pernicious anemia, for whose study this institute has been founded, is a disease well suited to investigation. First, it is a chronic disease and of chronic diseases we know far less of cause and cure than of acute disease, because they offer far greater difficulties in investigation than do acute diseases. Second, it is a disease which has a natural cycle of betterment and relapse, suggestive of a periodic recurring cause or a cycle in which cause first acquires ascendancy and then the human organism gains the upper hand; it is not a progressively degenerative process, as are so many of the chronic diseases, and this lends probability to great improvement in methods of treatment. Third, there is much to suggest an underlying condition, without which the disease can not develop; this suggests a strong possibility that it may be amenable to prevention whenever either the cause of the under-

lying condition, or the cause of the anemia itself may be discovered. Fourth, already encouraging results have come from certain dietary methods, recently applied in the treatment of the disease, and there are many problems, suggested by these dietary successes, open for immediate attack. Fifth, there are with pernicious anemia extremely interesting climatic relationships, which needs must have important bearing on cause, prevention and cure, if these relationships are investigated. Sixth, one of the underlying conditions seems to play a significant rôle in a large group of diseases, suggesting an immediate applicability of knowledge, gained from the study of pernicious anemia, to a larger group of diseases which taken together are of vast hygienic and economic importance to the human race. Seventh, with many recent improvements in methods of investigation of problems of disease, the time is ripe for such a study, as is made possible by the establishment and endowment of this institute. Eighth, this is, so far as I know, the first institute founded for the particular investigation of pernicious anemia; it has no competitors. Finally, the problem, though there are many obvious points of attack, is not going to be easy of solution. Patient persistence, imagination, ingenuity, knowledge of methods, broad understanding of many diseases and their treatment, coordinated, cooperative labor, will be required. The difficulties will stimulate the best endeavor of those selected to work within this institute. To solve successfully the problems set by pernicious anemia will be a worthy reward of high endeavor. The difficulties in the way will serve to attract a very superior type of investigator.

Auspiciously the Thomas Henry Simpson Memorial Institute for Medical Research is beginning its career. Well-wishers over the country will follow its activities with interest. In its successes they will rejoice, as you, its workers, follow the trail of investigation, which may be paraphrased in the words of Tennyson,

“Not of the sunlight,  
Not of the moonlight,  
Not of the starlight:  
O young mariner,  
Down to the haven,  
Call your companions,  
Launch your vessel  
And crowd your canvas,  
And, ere it vanishes  
Over the margin,  
After it, follow it,  
Follow the gleam.”

HENRY A. CHRISTIAN

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