Marshall Clagett's presence at the Institute would be singularly fitting both from the point of view of the historiography of science, and of his own career.

Taking thought of the whole state of the art, it seems fair to say that most of those who are striving to develop the history of science as a fully professional scholarly and academic discipline would consider Professor Clagett's work to be the most valuable, the most irreplaceable, currently being contributed by a scholar who is in the fullness of his powers. He is working in that area where the discoveries of scholarship in the last generation have been most surprising, specifically in medieval mechanics. There his Medieval Science of Weights gave promise of what his Medieval Science of Mechanics has comprehensively confirmed and established: a just appreciation of the accomplishments and a prudent estimation of the limitations of thirteenth and fourteenth century statics, kinematics, and dynamics. Professor Clagett has brought to a considerable art the integration of his own exposition with presentation of the texts in carefully established edition together with translation. Thereby he puts other scholars in the way of seeing the essential evidence and also of knowing what he makes of it. It is to be noted, moreover, that most of the other titles in the Wisconsin series on medieval mechanics are in a very direct way extensions of Professor Clagett's scholarship expressed in the persons of students and colleagues. He has formed a school, and that does not often happen in American scholarship.

Yet a further feature of Professor Clagett's career is impressive. He is gathering momentum as he reaches middle age, is becoming still more productive, and is currently upon two studies both of which will be even more original in their scholarship than his work in mechanics, which for all its careful collection and scrutiny of the texts does to some extent still depend upon the impetus given originally by Duhem. These are his forthcoming study of the transmission of knowledge of Archimedes through Islam and in the Latin West and his current studies of Oresme. The former is in proof -- correcting the proof for this is itself a work of scholarship in Arabic, Greek, Latin, and Geometry -- and the latter is in its formative stages.

Professor Clagett's career, then, is at a point where he would derive the utmost benefit from continuing it at the Institute. His method of working is achieved. He needs texts or copies of texts and early editions on which to work intensively and without interruption. He has done his part in the institutional development of his subject. He is completing his term as President of the History of Science Society and has been faithful in consulting with the National Science Foundation and other bodies who favor the history of science. He has been Chairman first of the Department of the History of Science and now of an Institute for the Humanities at the University of Wisconsin. He has left the former and could leave the latter in flourishing condition.

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Member, Academy of International History of Science.

Member, History of Science Society (Vice President, 1958-62; President, 1963 and 1964).

Vice Chairman, United States National Committee of the International Union for the History and Philosophy of Science.

Bibliography

Books:

A 100 g

Giovanni Marliani and Late Medieval Physics, New York 1941

The Medieval Science of Weights (Scientia de ponderibus): Treatises

Ascribed to Euclid, Archimedes, Thabit ibn Qurra, Jordanus de Nemore,
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"Some general aspects of medieval physics", <u>Isis</u> 39 (1948), pp. 29-44.

"The medieval heritage: political and economic", in <u>Chapters in Western</u> Civilization (New York 1948), pp. 3-73.

"The medieval heritage: religious, philosophic, scientific", <u>ibid</u>., pp. 74-122.

"Richard Swineshead and late medieval physics", Osiris 9 (1950), pp. 131-61.

"A medieval fragment of the <u>De sphaera et cylindro</u> of Archimedes", <u>Isis</u> 43 (1952) pp. 36-38.

"Archimedes in the Middle Ages: The <u>De mensura circuli</u>", <u>Osiris</u> 10 (1952) pp. 587-618.

"The use of the Moerbeke translations of Archimedes in the works of Johannes de Muris", <u>Isis</u> 43 (1952), pp. 236-42.

"Medieval mathematics and physics: a checklist of microfilm reproductions", Isis 44 (1953), pp. 371-81.

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"A medieval Latin translation of a short Arabic text on the hyperbola", Osiris 11 (1954), pp. 359-85.

"King Alfred and the Elements of Euclid", Isis 45 (1954), pp. 269-77.

"Science has a long history", in <u>The Challenge of Our Times</u> (ed. Farrington Daniels and Thomas M. Smith), Minneapolis 1954, pp. 28-38.

"The <u>De curvis superficiebus Archimenidis</u>: a medieval commentary of Johannes de Tinemue on Book I of the <u>De sphaera et cylindro</u> of Archimedes", <u>Osiris</u> 11 (1954), pp. 295-358.

"A note on the dating of the $\underline{\text{De}}$ curvis superficiebus Archimenidis", Isis 46 (1955), pp. 281-2.

"The Quadratura per lunulas, a thirteenth-century fragment of Simplicius' commentary of the Physics of Aristotle", in Essays on Medieval Life and Thought Presented in Honor of Austin Patterson Evans, New York 1955, pp. 99-108.

"The <u>Liber</u> <u>de</u> <u>Motu</u> of Gerard of Brussels and the origins of kinematics in the West", <u>Osiris</u> 12 (1956), pp. 73-175.

"Three notes: the mechanical problems of pseudo-Aristotle in the Middle Ages; further light on dating the <u>De curvis superficiebus Archimenidis</u>; Oresme and Archimedes", Isis 48 (1957), pp. 182-83.

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"Medieval mathematics, physics and philosophy: a revised catalogue of photographic reproductions", Manuscripta 2 (1958), pp. 131-54, and 3 (1959), pp. 19-37 (with J. E. Murdoch).

Books edited:

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Curtis Wilson: Medieval Logic and the Rise of Mathematical Physics

EDITORSHIPS

Dictionary of Scientific Biography, Associate Editor

Isis, Mediaeval Editor, 1953-1964

Publications in Mediaeval Science, University of Wisconsin Press, General Editor

PUBLICATIONS

Giovanni Marliani and Late Medieval Physics, New York, Columbia University Press, 1941.

"The Medieval Heritage" in Chapters in Western Civilization, Columbia University Press, New York, 1948, 1-123.

"Some General Aspects of Medieval Physics," Isis, 39, (1948), 29-44.

"Richard Swineshead and Late Medieval Physics," Osiris, 9 (1950), 131-61.

"Archimedes in the Middle Ages: The De mensura circuli," Osiris, 10, (1952), 587-618.

"A Medieval Fragment of the <u>De Sphaera et Cylindro</u> of Archimedes," <u>Isis</u>, 43 (1952), 36-38

(With Ernest Moody), <u>Medieval Science of Weights</u>, University of Wisconsin Press, Madison, 1952.

"Use of the Moerbeke Translations of Archimedes in the Works of Johannes de Muris," Isis, 43 (1952), 236-42.

"Medieval Latin Translations from the Arabic of the Elements of Euclid, etc." Isis, 44 (1953), 16-42.

"Medieval Mathematics and Physics: A Check List of Microfilm Reproductions," Isis, 44 (1953), 371-81.

"The <u>De curvis superficiebus Archimendis</u>: A Medieval Commentary of Johannes de Tinemue on Book I of the <u>De Sphaera et cylindro</u>, "Osiris, 11 (1954), 295-358.

"King Alfred and the Elements of Euclid," Isis, 45 (1954), 269-77.

"A Medieval Latin Translation of a Short Arabic Tract on the Hyperbola," Osiris, 11 (1954), 359-84.

Greek Science in Antiquity, New York, 1955.

"The Quadratura per lunulas: A Thirteenth-Century Fragment of Simplicius: Commentary on the Physics of Aristotle," Essays in Medieval Life and Thought, (1955), 99-108.

"The Liber de motu of Gerard of Brussels," Osiris, 12 (1956), 73-175.

Editor, Critical Problems in the History of Science, University of Wisconsin Press, 1959.

"Impact of Archimedes on Medieval Science," Isis, 50 (1959), 419-29

The Science of Mechanics in the Middle Ages, University of Wisconsin Press, 1959

Archimedes in the Middle Ages, Volume 1, Madison, 1964.

"Nicole Oresme and Medieval Scientific Thought", Proceedings of the American Philosophical Society, Vol. 108, No. 4 (August 1964), 298-309.

"The Pre-Galilean Configuration Doctrine: 'The Good Treatise on Uniform and Difform [Surfaces]'", Saggi su Galileo Galilei, (1967), 1-24

"A Medieval Archimedean-type Proof of the Law of the Lever," <u>Divinitas</u>, XI (1967), 805-820

"Johannes de Muris and the Problem of Proportional Means," Medicine, Science and Culture, (1968), 35-49

√ Nicole Oresme and the Medieval Geometry of Qualities, Madison, University of Wisconsin Press, 1968

"Some Novel Trends in the Science of the Fourteenth Century," Art, Science, and History in the Renaissance, (1968), 275-303

"The Quadrature by Lune in the Later Middle Ages," Philosophy, Science, and Method: Essays in Honor of Ernest Nagel, N. Y., 1969, pp. 508-522

"Prosdocimus de Beldomandis and Nicole Oresme's Proof of the Merton Rule of Uniformly Difform," <u>Isis</u>, (1969), 223-225

- ✓ "Archimedes" <u>Dictionary of Scientific Biography</u>, Vol. 1, 1970
- √ "Leonardo da Vinci and the Medieval Archimedes," Physis, 1970, pp. 100-151
- "Archimedes in the Late Middle Ages," Perspectives in the History of Science and Technology, University of Oklahoma Press, Norman, (1971), pp. 239-259

WORK IN PROGRESS

Archimedes in the Middle Ages, Volumes 2 and 3

Nicole Oresme and the Medieval Opposition to Astrology: An Edition, Translation and Analysis of his "Contra Divinatores"

The "Questio de Proportionibus Motuum" of Francischus de Ferraria

SOCIETY IN

First Vice President of the History of Science Society, 1958-62 President of the History of Science Society, 1962-64

Fellow of the Medieval Academy of America

Member, American Philosophical Society Vice President 1969 -

Fellow of the American Academy of Arts and Sciences

Member of the Deutsche Gesellschaft für Geschichte der Medizin, Naturwissenschaft und Technik

Member of the International Academy of the History of Science: Vice President, 1968-

AWARDS

Pfizer Award for outstanding publication in the History of Science - December, 1960.

Charles Homer Haskins Medal for outstanding publications in Medieval History, April, 1968.

December 20, 1963

Dr. Robert Oppenheimer Director, The Institute for Advanced Study

Dear Dr. Oppenheimer:

At a meeting held on December 9, 1963 the active professors in the School of Historical Studies voted unanimously to nominate Marshall Clagett to a professorship in the Institute for Advanced Study and to submit this nomination to the Director. At an earlier meeting of the School on October 31st a preliminary discussion of this nomination had been held; and, all members being in agreement, it had been decided to ask Professors Koyré, Neugebauer, Gillispie, and Edelstein to give us their confidential opinions concerning Clagett's work and our consideration of him for a professorship in the Institute. Professor Edelstein declined to give an opinion, saying that he "cannot claim any real familiarity with his [Clagett's] work". The answers sent by the other three gentlemen and Clagett's Vita and Bibliography are given as annexes to this letter.

At the meeting held on December 9th the members of the School discussed the opinions expressed in these three letters. They considered with special care the qualifying reservations in the letter from Professor Neugebauer, and all agreed that these reservations do not outweigh either the favorable estimate given by Neugebauer himself or the advantages which would accrue to the School and the Institute as a result of Clagett's appointment. All expressed agreement with the estimate given by Professor Gillispie in his letter and felt that his recommendation effectively presents the argument in favor of the appointment.

The faculty of the School is personally acquainted with Clagett, who has held a membership here several times, and on the basis of its personal experience is convinced that all its members and all members of the academic community in Princeton would profit greatly by his permanent association with the Institute. All have some knowledge of his attitude to his work and his scholarly methods and all find them congenial and admirable. His appointment would give the School a representative of the history of science, which itself has for some time been felt to be a desideratum, and one whose direct access to the sources "places him", as Neugebauer says, "far above the majority of his colleagues in the History of Science"; and his special concern with mediaeval science would at the same time partially recompense the School for the grievous loss that it has suffered by the death of Professor Kantorowicz. Moreover, in Neugebauer's words again, the kind of work that Clagett has done and is doing "is the most urgently needed type of contribution in the study of mediaeval sciences and very rare indeed"; and the faculty of the School feels that by his appointment the Institute may encourage more students of the history of science to turn to this kind of sound, critical, and profitable scholarship.

The faculty of the School of Historical Studies therefore submits to you the name of Marshall Clagett in nomination for a professorship in the Institute and requests that you bring this nomination before the full faculty of the Institute and in due course recommend the appointment to the trustees.

Respectfully,

Harold Cherniss, Executive Officer of the School of Historical Studies

Date of Birth: January 23, 1916

Education:

1933-35 California Institute of Technology 1935-37 A.B., George Washington University 1937-38 M.A., George Washington University 1938-41 Ph.D., Columbia University

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64

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 $\underline{\mathsf{C}} \ \underline{\mathsf{O}} \ \underline{\mathsf{P}} \ \underline{\mathsf{Y}}$

4 rue de Navarre Paris 5

6 Nov. 63

Dear Robert,

I have just received your letter of Oct. 31 and hasten to answer. As you have rightly surmized the news that the Institute considers offering a professorship to Marshall Clagett gave me a great pleasure. I think that it is a very good idea and I can only approve. Indeed, in my opinion - and it is not only my opinion but the communis opinio doctorum - Marshall Clagett is a scholar of the very first rank and one of the very best historians of science - certainly nulli secundus - not only in the States but also abroad.

As for his own field, that of the history of medieval science and its relations to the ancient one, a field the importance of which I do not need to stress, I think that he has no rival. This not only because he is at home in both - cf. his Greek Science in Antiquity and his truly magisterial Science of mechanics in the Middle Ages with its amazing erudition - but also because of his extraordinary ability to follow and to clarify the so subtle and, for us, so often so strange and so foreign reasonings of the scholastics.

This being so it seems to me that Marshall Clagett's appointment will be as profitable to the Institute as to himself.

With affectionate regards

Yours as ever

/s/ Alexandre Koyré

THE INSTITUTE FOR ADVANCED STUDY Princeton, New Jersey

November 2, 1963

Professor Harold Cherniss Institute for Advanced Study Princeton, New Jersey

Dear Harold:

In reply to your letter of October 31 concerning Marshall Clagett I can formulate my opinion as follows: his scholarship in the area of mediaeval mathematics, mechanics and general scientific thought is absolutely solid, in close contact with the very complex source material and greatly enhanced by his knowledge of Arabic. This alone places him far above the majority of his colleagues in the "History of Science." He is a hard worker and there is all good reason to expect him to continue turning out useful and respectable work. One may well say that this is the most urgently needed type of contribution in the study of mediaeval sciences, and very rare indeed.

On the other hand I do not think that there will be ever anything brilliant or really programmatic come out of Clagett's work. His book on Ancient Greek Science is a rather poor compilation. Kantorowicz, Huizinga, March Bloch would never have written a pedestrian essay, even outside their field of real competence.

Since you mention in your letter my "sympathetic interest in the Institute" I hope not to transgress my mandate by saying what my viewpoint would be with respect to the Institute. If the Institute were a University with a teaching staff and the field of Mediaeval Science to be represented I would not hesitate to consider Clagett the obvious candidate. For the Institute no such necessity exists. Clagett has an excellent position which gives him all possibilities for research and instruction as he wants it. Neither for Clagett personally nor for the field as such would much be changed by moving him from Wisconsin to Princeton. And about the same could be said for the Institute.

As to the second paragraph of your letter I think Gaines Post seems the person to express an opinion on Clagett as a mediaevalist.

Most cordially yours,

/s/ O. Neugebauer

COPY

PRINCETON UNIVERSITY PRINCETON, NEW JERSEY

Department of History

November 6, 1963

Dr. J. Robert Oppenheimer Institute for Advanced Study Princeton, New Jersey

Dear Dr. Oppenheimer:

Thank you for your invitation to submit my opinion of Marshall Clagett's work and of the appropriateness of his being asked to come to the Institute as a professor. It is a pleasure to be able to write about a colleague whose scholarship I admire so much. It appears to me, indeed, that his presence at the Institute would be singularly fitting from all the relevant points of view: that of the historiography of science, that of Professor Clagett's own career, that of the scholarly community in Princeton, and finally (if I may say so) that of the Institute itself in its school of historical studies. Let me address myself to these considerations in turn.

Taking thought of the Whole state of the art, I believe that most of us who are striving to develop the history of science as a fully professional scholarly and academic discipline would consider Professor Clagett's work to be the most valuable, the most irreplaceable, currently being contributed by a scholar who is in the fullness of his powers. He is working as you know in that area where the discoveries of scholarship in the last generation have been most surprising, specifically in medieval mechanics. There his Medieval Science of Weights gave promise of what his Medieval Science of Mechanics has comprehensively confirmed and established: a just appreciation of the accomplishments and a prudent estimation of the limitations of thirteenth and fourteenth century statics, kinematics, and dynamics. Professor Clagett has brought to a considerable art the integration of his own exposition with presentation of the texts in carefully established edition together with translation. Thereby he puts other scholars in the way of seeing the essential evidence and also of knowing what he makes of it. It is to be noted, moreover, that most of the other titles, which I will not detail, in the Wisconsin series on medieval mechanics are in a very direct way extensions of Professor Clagett's scholarship expressed in the persons of students and colleagues. He has formed a school, and that does not often happen in American scholarship.

There is a further factor to be emphasized, which is that Professor Clagett is primarily and preeminently a professional historian of science. It may be that thereby his work loses certain sharpnesses of perspective which appear in the work of others who come to their subject-matter from some more special point of vantage. His is not so exact a vein as that of Neugebauer. It is not so alive to metaphysical nuance as that of Koyré. It is not so sensitive to the inwardness of scholasticism as that

Dr. J. Robert Oppenheimer--Page 2

of Anneliese Maier. But admirable and valuable as their works are (not to go back to comparisons with Duhem or Tannery), behind the intrinsic excellence of those scholars in themselves their special qualities arise from their having come to the history of science from mathematics or philosophy. I think it is fair to say that Professor Clagett is of the first generation to set out as professional historians of science, and in my opinion -- I shan't labor comparisons to the disadvantage of others -- he is the best of us in any field of the history of science. He brings to his work, moreover, the distinctive, you may perhaps think as compared to Koyré or Neugebauer the more modest, but still the essential touch of the historian: his account never lacks body and never loses its sense of the context. It is, moreover, -- and now no comparison is intended -- very thorough. It may be a defect of this quality that he has no gift of simplification or popularization. The one book that is not good is also the one that he never intended as a contribution to scholarship: Greek Science in Antiquity.

Yet a further feature of Professor Clagett's career impresses me. He is gathering momentum as he reaches middle age, is becoming still more productive, and is currently upon two studies both of which will be even more original in their scholarship than his work in mechanics, which for all its careful collection and scrutiny of the texts does to some extent still depend upon the impetus given originally by Duhem. I refer here to his forthcoming study of the transmission of knowledge of Archimedes through Islam and in the Latin West and his current studies of Oresme. The former is in proof -- correcting the proof for this is itself a work of scholarship in Arabic, Greek, Latin, and Geometry -- and the latter is in its formative stages.

Professor Clagett's career, then, is at a point where he would derive the utmost benefit from continuing it at the Institute. His method of working is achieved. He needs texts or copies of texts and early editions on which to work intensively and without interruption. He has done his part (it would seem to me) in the institutional development of our subject. He is completing his term as President of the History of Science Society and has been faithful in consulting with the National Science Foundation and other bodies who favor our work. He has been Chairman first of the Department of the History of Science and now of an Institute for the Humanities at the University of Wisconsin. He has left the former and could leave the latter in flourishing condition. These are important enterprises, but others now have come along who could administer them. My sense of Professor Clagett's own desire is that he would now like to devote all his energy to scholarship.

It is evident that it would be a great enrichment to the historical community in Princeton if Professor Clagett were to be doing his work here. I also venture to think that it would be important for him to have access to good company in the history of science, and perhaps it will not be amiss if I mention that we are in the midst of significant development at the University. It will not be a breach of confidence to say that President Goheen has recently given assurances about the

Dr. J. Robert Oppenheimer--Page 3

support the Administration will give to our intention to create studies in the history and philosophy of science on a scale second to none. We are planning and hoping for several appointments, one of which you know about. We mean, too, to have work in history of biology, in Islamic science, and in that of classical antiquity, though matters are not yet such that names can be mentioned. I go into it this far only because it would obviously not be appropriate for me to support Professor Clagett's appointment in the thought that his presence would relieve us of staffing problems. We intend to provide fully for our responsibilities in instruction both of undergraduate and graduate students. Nevertheless, the presence of a group of historians of science on a considerable scale would clearly be welcome to Professor Clagett, and the presence of one of his standing would be an inestimable encouragement to us. If it happened, further, that he wished to have a seminar on occasion, whether of faculty or graduate students or both, and his doing so were acceptable to the Institute, there would always be a standing invitation, but never I trust an exploitation. We have a lively and intelligent group of graduate students at the present time and I am hopeful that the subject will prove increasingly attractive to able and qualified people coming on to graduate school.

I hope, finally, that it will not be impertinent if I write a word about the Institute itself. Quite apart from the accident of my being at Princeton, it is my feeling as a historian of science that the appointment of a professor in our discipline in the School of Historical Studies would be a great encouragement to us and entirely in keeping with the commitment of the Institute as a whole. The matter of the Rosenwald Collection needs only to be mentioned. It has meant everything to Alexandre Koyré to work therein, and no one else comes to mind whose particular cast of work is so well suited as is Professor Clagett's to continue to make the most of those resources. Beyond that remark, however, it would be intrusive of me to venture, and I shall, therefore, simply express the hope, which I feel confident would be shared more widely by my colleagues than in the case of any other candidate, that the Institute will indeed see fit to name Professor Clagett to a professorship.

With all best wishes,

Very sincerely yours,
/s/ Charles C. Gillispie
Charles C. Gillispie

CCG:ss

December 20, 1963

Dr. Robert Oppenheimer Director, The Institute for Advanced Study

Dear Dr. Oppenheimer:

At a meeting held on December 9, 1963 the active professors in the School of Historical Studies voted unanimously to nominate Marshall Clagett to a professorship in the Institute for Advanced Study and to submit this nomination to the Director. At an earlier meeting of the School on October 31st a preliminary discussion of this nomination had been held; and, all members being in agreement, it had been decided to ask Professors Koyré, Neugebauer, Gillispie, and Edelstein to give us their confidential opinions concerning Clagett's work and our consideration of him for a professorship in the Institute. Professor Edelstein declined to give an opinion, saying that he "cannot claim any real familiarity with his [Clagett's] work". The answers sent by the other three gentlemen and Clagett's Vita and Bibliography are given as annexes to this letter.

At the meeting held on December 9th the members of the School discussed the opinions expressed in these three letters. They considered with special care the qualifying reservations in the letter from Professor Neugebauer, and all agreed that these reservations do not outweigh either the favorable estimate given by Neugebauer himself or the advantages which would accrue to the School and the Institute as a result of Clagett's appointment. All expressed agreement with the estimate given by Professor Gillispie in his letter and felt that his recommendation effectively presents the argument in favor of the appointment.

The faculty of the School is personally acquainted with Clagett, who has held a membership here several times, and on the basis of its personal experience is convinced that all its members and all members of the academic community in Princeton would profit greatly by his permanent association with the Institute. All have some knowledge of his attitude to his work and his scholarly methods and all find them congenial and admirable. His appointment would give the School a representative of the history of science, which itself has for some time been felt to be a desideratum, and one whose direct access to the sources "places him", as Neugebauer says, "far above the majority of his colleagues in the History of Science"; and his special concern with mediaeval science would at the same time partially recompense the School for the grievous loss that it has suffered by the death of Professor Kantorowicz. Moreover, in Neugebauer's words again, the kind of work that Clagett has done and is doing "is the most urgently needed type of contribution in the study of mediaeval sciences and very rare indeed"; and the faculty of the School feels that by his appointment the Institute may encourage more students of the history of science to turn to this kind of sound, critical, and profitable scholarship.

The faculty of the School of Historical Studies therefore submits to you the name of Marshall Clagett in nomination for a professorship in the Institute and requests that you bring this nomination before the full faculty of the Institute and in due course recommend the appointment to the trustees.

Respectfully,

Harold Cherniss, Executive Officer of the School of Historical Studies

Date of Birth: January 23, 1916

Education:

1933-35 California Institute of Technology 1935-37 A.B., George Washington University 1937-38 M.A., George Washington University 1938-41 Ph.D., Columbia University

Professional Career:

1946-47 History Department, Columbia University, Instructor

1947-- History of Science Department, University of Wisconsin, Assistant Professor 1947-49; Associate Professor 1949-54; Professor 1954--

1959-- Director, Institute for Research in the Humanities

Affiliations:

Member, The Institute for Advanced Study, 1958-59; 1962/63, second term.

Member, The American Philosophical Society since 1960.

Fellow, American Academy of Arts and Sciences.

Fellow, Mediaeval Academy of America.

Member, Academy of International History of Science.

Member, History of Science Society (Vice President, 1958-62; President, 1963 and 1964).

Vice Chairman, United States National Committee of the International Union for the History and Philosophy of Science.

Bibliography

Books:

Giovanni Marliani and Late Medieval Physics, New York 1941

The Medieval Science of Weights (Scientia de ponderibus): Treatises

Ascribed to Euclid, Archimedes, Thabit ibn Qurra, Jordanus de Nemore,
and Blasius of Parma, (with Ernest A. Moody), 1952

Greek Science in Antiquity, New York 1955

The Science of Mechanics in the Middle Ages, Madison 1959. Republished 1961

In press or in preparation:

Archimedes in the Middle Ages, 2 vols.

De configurationibus qualitatum of Nicole Oresme, critical text with annotations.

Articles:

"Note on the <u>Tractatus physici</u> falsely attributed to Giovanni Marliani", <u>Isis</u> 34 (1942), p. 168.

"Some general aspects of medieval physics", <u>Isis</u> 39 (1948), pp. 29-44.

"The medieval heritage: political and economic", in <u>Chapters in Western</u> Civilization (New York 1948), pp. 3-73.

"The medieval heritage: religious, philosophic, scientific", ibid., pp. 74-122.

"Richard Swineshead and late medieval physics", Osiris 9 (1950), pp. 131-61.

"A medieval fragment of the <u>De sphaera et cylindro</u> of Archimedes", <u>Isis</u> 43 (1952) pp. 36-38.

"Archimedes in the Middle Ages: The <u>De mensura circuli</u>", <u>Osiris</u> 10 (1952) pp. 587-618.

"The use of the Moerbeke translations of Archimedes in the works of Johannes de Muris", <u>Isis</u> 43 (1952), pp. 236-42.

"Medieval mathematics and physics: a checklist of microfilm reproductions", Isis 44 (1953), pp. 371-81.

"The medieval Latin translations from the Arabic of the <u>Elements</u> of Euclid, with special emphasis on the versions of Adelard of Bath", <u>Isis</u> 44 (1953), pp. 16-42.

"A medieval Latin translation of a short Arabic text on the hyperbola", Osiris 11 (1954), pp. 359-85.

"King Alfred and the Elements of Euclid", Isis 45 (1954), pp. 269-77.

"Science has a long history", in <u>The Challenge of Our Times</u> (ed. Farrington Daniels and Thomas M. Smith), Minneapolis 1954, pp. 28-38.

"The <u>De curvis superficiebus Archimenidis</u>: a medieval commentary of Johannes de Tinemue on Book I of the <u>De sphaera et cylindro</u> of Archimedes", Osiris 11 (1954), pp. 295-358.

"A note on the dating of the $\underline{\text{De}}$ curvis superficiebus Archimenidis", Isis 46 (1955), pp. 281-2.

"The Quadratura per lunulas, a thirteenth-century fragment of Simplicius' commentary of the Physics of Aristotle", in Essays on Medieval Life and Thought Presented in Honor of Austin Patterson Evans, New York 1955, pp. 99-108.

"The Liber de Motu of Gerard of Brussels and the origins of kinematics in the West", Osiris 12 (1956), pp. 73-175.

"Three notes: the mechanical problems of pseudo-Aristotle in the Middle Ages; further light on dating the <u>De curvis superficiebus Archimenidis</u>; Oresme and Archimedes", <u>Isis</u> 48 (1957), pp. 182-83.

"The impact of Archimedes on medieval science", Isis 50 (1959), pp. 419-29.

"Medieval mathematics, physics and philosophy: a revised catalogue of photographic reproductions", Manuscripta 2 (1958), pp. 131-54, and 3 (1959), pp. 19-37 (with J. E. Murdoch).

Books edited:

Critical Problems in the History of Science, Proceedings of the Institute for the History of Science at the University of Wisconsin, 1957

Twelfth-century Europe and the Foundations of Modern Society (with Gaines Post and Robert Reynolds), Madison 1961

H. Lamar Crosby, Jr.: Thomas of Bradwardine: His "Tractatus de proportionibus". Its Significance for the Development of Mathematical Physics

Curtis Wilson: Medieval Logic and the Rise of Mathematical Physics

PRINCETON UNIVERSITY PRINCETON, NEW JERSEY

Department of History

November 6, 1963

Dr. J. Robert Oppenheimer Institute for Advanced Study Princeton, New Jersey

Dear Dr. Oppenheimer:

Thank you for your invitation to submit my opinion of Marshall Clagett's work and of the appropriateness of his being asked to come to the Institute as a professor. It is a pleasure to be able to write about a colleague whose scholarship I admire so much. It appears to me, indeed, that his presence at the Institute would be singularly fitting from all the relevant points of view: that of the historiography of science, that of Professor Clagett's own career, that of the scholarly community in Princeton, and finally (if I may say so) that of the Institute itself in its school of historical studies. Let me address myself to these considerations in turn.

Taking thought of the whole state of the art. I believe that most of us who are striving to develop the history of science as a fully professional scholarly and academic discipline would consider Professor Clagett's work to be the most valuable, the most irreplaceable, currently being contributed by a scholar who is in the fullness of his powers. He is working as you know in that area where the discoveries of scholarship in the last generation have been most surprising, specifically in medieval mechanics. There his Medieval Science of Weights gave promise of what his Medieval Science of Mechanics has comprehensively confirmed and established: a just appreciation of the accomplishments and a prudent estimation of the limitations of thirteenth and fourteenth century statics, kinematics, and dynamics. Professor Clagett has brought to a considerable art the integration of his own exposition with presentation of the texts in carefully established edition together with translation. Thereby he puts other scholars in the way of seeing the essential evidence and also of knowing what he makes of it. It is to be noted, moreover, that most of the other titles, which I will not detail, in the Wisconsin series on medieval mechanics are in a very direct way extensions of Professor Clagett's scholarship expressed in the persons of students and colleagues. He has formed a school, and that does not often happen in American scholarship.

There is a further factor to be emphasized, which is that Professor Clagett is primarily and preeminently a professional historian of science. It may be that thereby his work loses certain sharpnesses of perspective which appear in the work of others who come to their subject-matter from some more special point of vantage. His is not so exact a vein as that of Neugebauer. It is not so alive to metaphysical nuance as that of Koyré. It is not so sensitive to the inwardness of scholasticism as that

Dr. J. Robert Oppenheimer--Page 2

of Anneliese Maier. But admirable and valuable as their works are (not to go back to comparisons with Duhem or Tannery), behind the intrinsic excellence of those scholars in themselves their special qualities arise from their having come to the history of science from mathematics or philosophy. I think it is fair to say that Professor Clagett is of the first generation to set out as professional historians of science, and in my opinion -- I shan't labor comparisons to the disadvantage of others -- he is the best of us in any field of the history of science. He brings to his work, moreover, the distinctive, you may perhaps think as compared to Koyré or Neugebauer the more modest, but still the essential touch of the historian: his account never lacks body and never loses its sense of the context. It is, moreover, -- and now no comparison is intended -- very thorough. It may be a defect of this quality that he has no gift of simplification or popularization. The one book that is not good is also the one that he never intended as a contribution to scholarship: Greek Science in Antiquity.

Yet a further feature of Professor Clagett's career impresses me. He is gathering momentum as he reaches middle age, is becoming still more productive, and is currently upon two studies both of which will be even more original in their scholarship than his work in mechanics, which for all its careful collection and scrutiny of the texts does to some extent still depend upon the impetus given originally by Duhem. I refer here to his forthcoming study of the transmission of knowledge of Archimedes through Islam and in the Latin West and his current studies of Oresme. The former is in proof -- correcting the proof for this is itself a work of scholarship in Arabic, Greek, Latin, and Geometry -- and the latter is in its formative stages.

Professor Clagett's career, then, is at a point where he would derive the utmost benefit from continuing it at the Institute. His method of working is achieved. He needs texts or copies of texts and early editions on which to work intensively and without interruption. He has done his part (it would seem to me) in the institutional development of our subject. He is completing his term as President of the History of Science Society and has been faithful in consulting with the National Science Foundation and other bodies who favor our work. He has been Chairman first of the Department of the History of Science and now of an Institute for the Humanities at the University of Wisconsin. He has left the former and could leave the latter in flourishing condition. These are important enterprises, but others now have come along who could administer them. My sense of Professor Clagett's own desire is that he would now like to devote all his energy to scholarship.

It is evident that it would be a great enrichment to the historical community in Princeton if Professor Clagett were to be doing his work here. I also venture to think that it would be important for him to have access to good company in the history of science, and perhaps it will not be amiss if I mention that we are in the midst of significant development at the University. It will not be a breach of confidence to say that President Goheen has recently given assurances about the

Dr. J. Robert Oppenheimer--Page 3

support the Administration will give to our intention to create studies in the history and philosophy of science on a scale second to none. We are planning and hoping for several appointments, one of which you know about. We mean, too, to have work in history of biology, in Islamic science, and in that of classical antiquity, though matters are not yet such that names can be mentioned. I go into it this far only because it would obviously not be appropriate for me to support Professor Clagett's appointment in the thought that his presence would relieve us of staffing problems. We intend to provide fully for our responsibilities in instruction both of undergraduate and graduate students. Nevertheless, the presence of a group of historians of science on a considerable scale would clearly be welcome to Professor Clagett, and the presence of one of his standing would be an inestimable encouragement to us. If it happened, further, that he wished to have a seminar on occasion, whether of faculty or graduate students or both, and his doing so were acceptable to the Institute, there would always be a standing invitation, but never I trust an exploitation. We have a lively and intelligent group of graduate students at the present time and I am hopeful that the subject will prove increasingly attractive to able and qualified people coming on to graduate school.

I hope, finally, that it will not be impertinent if I write a word about the Institute itself. Quite apart from the accident of my being at Princeton, it is my feeling as a historian of science that the appointment of a professor in our discipline in the School of Historical Studies would be a great encouragement to us and entirely in keeping with the commitment of the Institute as a whole. The matter of the Rosenwald Collection needs only to be mentioned. It has meant everything to Alexandre Koyré to work therein, and no one else comes to mind whose particular cast of work is so well suited as is Professor Clagett's to continue to make the most of those resources. Beyond that remark, however, it would be intrusive of me to venture, and I shall, therefore, simply express the hope, which I feel confident would be shared more widely by my colleagues than in the case of any other candidate, that the Institute will indeed see fit to name Professor Clagett to a professorship.

With all best wishes,

Very sincerely yours, /s/ Charles C. Gillispie Charles C. Gillispie

CCG:ss

 $\underline{\mathsf{C}} \ \underline{\mathsf{O}} \ \underline{\mathsf{P}} \ \underline{\mathsf{Y}}$

4 rue de Navarre Paris 5

6 Nov. 63

Dear Robert,

I have just received your letter of Oct. 31 and hasten to answer. As you have rightly surmized the news that the Institute considers offering a professorship to Marshall Clagett gave me a great pleasure. I think that it is a very good idea and I can only approve. Indeed, in my opinion - and it is not only my opinion but the communis opinio doctorum - Marshall Clagett is a scholar of the very first rank and one of the very best historians of science - certainly nulli secundus - not only in the States but also abroad.

As for his own field, that of the history of medieval science and its relations to the ancient one, a field the importance of which I do not need to stress, I think that he has no rival. This not only because he is at home in both - cf. his Greek Science in Antiquity and his truly magisterial Science of mechanics in the Middle Ages with its amazing erudition - but also because of his extraordinary ability to follow and to clarify the so subtle and, for us, so often so strange and so foreign reasonings of the scholastics.

This being so it seems to me that Marshall Clagett's appointment will be as profitable to the Institute as to himself.

With affectionate regards

Yours as ever

/s/ Alexandre Koyré

<u>C</u> <u>O</u> <u>P</u> <u>Y</u>

COPY

THE INSTITUTE FOR ADVANCED STUDY Princeton, New Jersey

November 2, 1963

Professor Harold Cherniss Institute for Advanced Study Princeton, New Jersey

Dear Harold:

In reply to your letter of October 31 concerning Marshall Clagett I can formulate my opinion as follows: his scholarship in the area of mediaeval mathematics, mechanics and general scientific thought is absolutely solid, in close contact with the very complex source material and greatly enhanced by his knowledge of Arabic. This alone places him far above the majority of his colleagues in the "History of Science." He is a hard worker and there is all good reason to expect him to continue turning out useful and respectable work. One may well say that this is the most urgently needed type of contribution in the study of mediaeval sciences, and very rare indeed.

On the other hand I do not think that there will be ever anything brilliant or really programmatic come out of Clagett's work. His book on Ancient Greek Science is a rather poor compilation. Kantorowicz, Huizinga, March Bloch would never have written a pedestrian essay, even outside their field of real competence.

Since you mention in your letter my "sympathetic interest in the Institute" I hope not to transgress my mandate by saying what my viewpoint would be with respect to the Institute. If the Institute were a University with a teaching staff and the field of Mediaeval Science to be represented I would not hesitate to consider Clagett the obvious candidate. For the Institute no such necessity exists. Clagett has an excellent position which gives him all possibilities for research and instruction as he wants it. Neither for Clagett personally nor for the field as such would much be changed by moving him from Wisconsin to Princeton. And about the same could be said for the Institute.

As to the second paragraph of your letter I think Gaines Post seems the person to express an opinion on Clagett as a mediaevalist.

Most cordially yours,

/s/ 0. Neugebauer

December 20, 1963

Dr. Robert Oppenheimer Director, The Institute for Advanced Study

Dear Dr. Oppenheimer:

At a meeting held on December 9, 1963 the active professors in the School of Historical Studies voted unanimously to nominate Marshall Clagett to a professorship in the Institute for Advanced Study and to submit this nomination to the Director. At an earlier meeting of the School on October 31st a preliminary discussion of this nomination had been held; and, all members being in agreement, it had been decided to ask Professors Koyré, Neugebauer, Gillispie, and Edelstein to give us their confidential opinions concerning Clagett's work and our consideration of him for a professorship in the Institute. Professor Edelstein declined to give an opinion, saying that he "cannot claim any real familiarity with his [Clagett's] work". The answers sent by the other three gentlemen and Clagett's Vita and Bibliography are given as annexes to this letter.

At the meeting held on December 9th the members of the School discussed the opinions expressed in these three letters. They considered with special care the qualifying reservations in the letter from Professor Neugebauer, and all agreed that these reservations do not outweigh either the favorable estimate given by Neugebauer himself or the advantages which would accrue to the School and the Institute as a result of Clagett's appointment. All expressed agreement with the estimate given by Professor Gillispie in his letter and felt that his recommendation effectively presents the argument in favor of the appointment.

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The faculty of the School of Historical Studies therefore submits to you the name of Marshall Clagett in nomination for a professorship in the Institute and requests that you bring this nomination before the full faculty of the Institute and in due course recommend the appointment to the trustees.

Respectfully,

Harold Cherniss, Executive Officer of the School of Historical Studies