fort. The "Hortus," or "Ortus," was first issued at Metz about 1475, and other editions appeared at Strasburg about 1590 and later. The part entitled "Tractatus de piscibus" is divided into many short chapters, and has numerous woodcuts of fish and fishing, all of very singular character.

Those who are familiar with ancient angling literature will recall in this connection the earliest known book on fowling and fishing, written in Flemish and printed at Antwerp in 1492. It is usually referred to as the "Boecken," or in German as "Buechlin" or "Fischbuchlin" (editions of 1552 and 1578), and contains woodcuts of angling scenes. As a treatise on fishing, this tract has priority in date over "The Book of St. Albans," ascribed to Dame Juliana Barnes, Bernes or Berners. The first edition of this work was printed by the school-master printer of St. Albans in 1486, but did not contain the "Treatyse of fysshynge wyth an angle" with its accompanying woodcut. The second edition, from the press of Wynkyn de Worde at Westminster in 1496, does contain it, however, and it appears also to have been published as a "lytyll plaunflet" in London about 1500. There are excellent modern facsimile editions of both the "Book of St. Albans" (M. G. Watkins, 1880) and the early Flemish tract known as "Boecxken" (Alfred Denison, 1872). A still earlier facsimile edition of Dame Barnes' book is that by Mr. Joseph Haslewood, in 1810; and in 1816 the same bibliographer brought out the second English edition of "The Dialogues of Creatures Moralysed." The edition was limited to 100 copies, and of these 56 were destroyed by fire. A Dutch version was printed in 1480, and a French in 1482, both of them containing illustrations of fish and fishing scenes.

Modern reproductions have also been published of the remarkably fine animal drawings in the "Album de Villard de Honnecourt" (Lassus, 1858), dating from the thirteenth century in France, and in "Das Tierbuch des Petrus Candidus, geschrieben 1460" (Killermann, 1914). It is to be hoped that before very long we may have at our disposal facsimile reprints of the wonderful animal figures, including fishes, which embellish four valuable codices preserved in the Landesbibliothek at Stuttgart. Two of these manuscripts happen to be translations of the "Liber de Natura Rerum," by Thomas of Cantimpré, who spent fifteen years in its preparation prior to 1240. Strangely enough, although translations of this work have been published (one of them by Konrad von Megenberg, noticed above), the original text has never been printed. Large portions of it were, however, incorporated by Vincent de Beauvais in his various works, especially his the "Speculum Naturale." Besides the Stuttgart codex of Thomas Cantipratensis, others are preserved in the libraries of Paris and Cracow. In Book VII., the author treats of freshwater and marine fishes.

For the benefit of those interested in the history of early prints and book illustrations we may refer finally to the recently published "List of works in the New York Public Library relating to prints and their production," compiled by F. Weitenkampf (1915), and also to Dr. Ludwig Choulant's articles on illustrated incunabula relating to natural history and medicine. C. R. EASTMAN

AMERICAN MUSEUM OF NATURAL HISTORY, New York

## SCIENTIFIC EVENTS CALIFORNIA PETROLEUM

WITHIN a few days there will be issued the Report of the Committee on Petroleum of the California State Council of Defense. The members of the Committee on Petroleum are:

- Max Thelen, president California Railroad Commission, chairman,
- Eliot Blackwelder, professor of geology, University of Illinois,
- David M. Folsom, professor of mining, Stanford University.

The committee was appointed by Governor Wm. D. Stephens on May 9, 1917, for the purpose of ascertaining and reporting to him the facts with reference to the production, distribution and utilization of California petroleum and its products. The report has been apSCIENCE

proved by Governor Stephens and has been forwarded by him to President Wilson with an urgent plea for action by the federal government to solve California's and the nation's petroleum problem.

The report consists of 12 chapters, as follows:

- Chapter I. Letter of Transmittal.
- Chapter II. World Petroleum Situation.
- Chapter III. California Petroleum Fields.
- Chapter IV. Production of California Petroleum.
- Chapter V. Storage of California Petroleum.
- Chapter VI. Transportation of California Petroleum.
- Chapter VII. Refining of California Petroleum.
- Chapter VIII. Utilization of California Petroleum.
- Chapter IX. General Review—Production and Consumption.
- Chapter X. Production-Maintenance and Increase.
- Chapter XI. Conservation.
- Chapter XII. Conclusions and Recommendations.

Chapter XII. contains the committee's conclusions and recommendations, and the two preceding chapters deal with the possibilities, respectively, of increasing the supply and of decreasing the consumption of California petroleum and its products.

## THE STATES RELATIONS SERVICE AND AGRI-CULTURAL INSTRUCTION

Resolutions were passed at a conference in Washington on May 5, 1917, by representatives of the National Association of State Universities, the Association of American Agricultural Colleges and Experiment Stations, the Association of American Universities, the Association of American Colleges, and the institutional committee of the Society for the Promotion of Engineering Education, requesting the advisory commission to recommend to the Council of National Defense that it approve the plan of developing and issuing at once through the States Relations Service of the U. S. Department of Agriculture a statement of a comprehensive policy of cooperation between the government and the universities, colleges and other schools which will make for the most effective use of these institutions along agricultural lines throughout the duration of the war. In order to carry out this program the States Relations Service has appointed the following committee:

- Professor G. A. Works, Cornell University.
- Mr. L. H. Dennis, director of vocational agricultural instruction.
- Professor H. F. Cotterman, Maryland State Col-<sup>i</sup> lege of Agriculture.
- Dr. C. H. Winkler, University of West Virginia.
- Professor F. B. Jenks, University of Vermont, secretary.
- Mr. C. H. Lane, States Relations Service, chairman.

The States Relations Service will bring this committee together in Washington from time to time, as may seem expedient, with the committee on education of the advisory commission for the consideration of the best methods of maintaining, adjusting and strengthening the agricultural instruction of the country in order to meet the emergencies of the war and to plan for the period following the war.

## MEDICAL STUDENTS AND THE DRAFT

THE Provost Marshall General has sent the following to governors of all states:

The President prescribes the following supplemental regulations governing the execution of the selective-service law.

First. Hospital internes who are graduates of well-recognized medical schools or medical students in their fourth, third, or second year in any well-recognized medical school who have not been called by a local board may enlist in the Enlisted Reserve Corps provided for by section 55 of the national defense act under regulations to be issued by the Surgeon General, and if they are thereafter called by a local board they may be discharged on proper claim presented on the ground that they are in the military service of the United States.

Second. A hospital interne who is a graduate of a well-recognized medical school or a medical student in his fourth, third, or second year in any well-recognized medical school, who has been called by a local board and physically examined and accepted and by or in behalf of whom no claim for exemption or discharge is pending, and who has not been ordered to military duty, may apply to the Surgeon General of the Army to be ordered to