the Senate view. An agreement to knock history, geography, and some other subjects out of the bill had been part of a compromise reached to gain bipartisan backing for the bill when it was passed in the House in August, and the House Republicans resented the conference revisions and refused to sign the conference report.

The Republicans insisted that federal support of institutes in subjects such as history opened the door to federal influence on subject matter. They argued that the possibility is present in the institute program because the Commissioner of Education has authority to select universities to operate institutes and could pick institutions which stress particular teaching methods or subject matter. (Other sections of the bill which affect the public schools are administered through state education agencies according to state plans.) The critics see the risks as being greater in history, where the ideological implications are much greater, than in the sciences, mathematics, or languages.

These arguments did not prevail, and a motion to recommit the bill was defeated by a vote of 236 to 107. Final passage came on a 320 to 20 vote which probably reflected not only the general popularity of the NDEA, but the members' anxiety to adjourn.

Passage of the NDEA amendments furnished the capstone to the most impressive record of education legislation built by any Congress. Not only did the 88th enact the Health Professions Educational Assistance Act (*Science*, 3 May 1963), major amendments to the Vocational Education Act (*Science*, 14 June 1963) and the Higher Education Facilities Act (*Science*, 20 December 1963) but also provided substantial aid to education in measures not labeled education.

The Economic Opportunity Act of 1964, more familiarly known as the Poverty bill, is in large part designed to support education, broadly defined. Under the section which provides funds for community action, much of the money is expected to go into special programs to improve the education of "disadvantaged" children in urban and rural slums. Funds for adult literacy training are included in the law as is a special work-study program to stimulate part-time employment for students in institutions of higher education who come from low income families and need such earnings to continue their education.

The 1963 amendments of the Manpower Development and Training Act adjust provisions of the law to make it better fitted to suit the actual needs of undereducated young people and the older unemployed as well.

The 88th Congress's record in education, therefore, amounts to a legislative feast after a famine dating from 1958. And it is natural to speculate on how it happened.

Much has been said about President Johnson's effectiveness as a persuader of Congress. Certainly his energy and skill in using all the stops on the presidential console cannot be minimized, but to chalk up the whole legislative bag of the last 11 months to him would be oversimplifying things.

The higher education bill and vocational education bill were passed in the month that remained of the first session of the 88th Congress after the assassination of President Kennedy, and these bills were at least in part memorials to the late President.

In addition to the atmosphere created by the assassination, Congress had bogged down in its consideration of the Civil Rights and tax-cut bills and was smarting under the reproaches of journalists and political scientists for institutional sclerosis. It, therefore, wanted to put some significant legislation into the record.

This year, also, the perennial House-Senate rivalry, which has been most apparent in appropriations matters, subsided somewhat, in part it would appear, because of the death of Clarence Cannon (D–Mo.), the shrewd, proud, and domineering longtime chairman of the House Appropriations Committee. It is also worth noting that the House leadership, with its first year of experience after the death of Speaker Sam Rayburn behind it, proved more adroit in the second year.

The record of the 88th Congress would appear to signal a significant alteration in the attitude of Congress to education legislation.

By handsomely increasing funds for the college loan fund the legislators proved ready to underwrite with federal funds the increasingly popular practice of "study now, pay later."

In broadening the categorical restrictions applying to teacher institutes and funds for equipment, Congress was, in part, reacting to criticism from outside and inside that federal aid in support of science, mathematics, and languages was causing imbalances in American education. Mrs. Edith Green (D–Ore.), chairman of the House subcommittee which handles higher education legislation has been one of the most insistent and most effective voices calling attention to this imbalance.

By making federal stipends (of $75 a month plus allowances for dependents) to teachers attending summer training institutes available to teachers in private schools, including church-related ones, Congress quietly finessed the religious issue, basing the payments on "individual benefit" rather than on benefit to the schools.

In the Poverty bill and by opening NDEA institutes to teachers of disadvantaged youth Congress more explicitly than ever before showed itself disposed to use federal funds as an "equalizer" in education.

Oddly, the magnitude of the changes in the NDEA seem not to have been widely noticed. Amendments which, for example, increase graduate fellowships fivefold by 1967, however, denote a very considerable expansion. And it is not really extravagant to suggest that these amendments will have as much impact on American education as did the original bill.—JOHN WALSH

Announcements

Fifty persons who have held Woodrow Wilson fellowships have been selected to teach for a year at 33 southern colleges, most of them predominantly Negro, under an internship plan worked out between the colleges and the Woodrow Wilson National Fellowship Foundation. The participants have had at least 2 years of graduate study, and most of them are between masters' and doctors' degrees.

The program is supported by a 3-year, $405,000 grant from the Rockefeller Foundation, intended to help "provide a means of access to good graduate schools for those gifted students whose undergraduate training may have lacked breadth in the liberal arts." The Wilson interns will work with these students in extracurricular seminars and individual tutoring aimed at encouraging them to consider graduate schools and careers in college teaching. The interns will be released from one quarter of their teaching time to participate in this program.

The National Academy of Sciences has established a committee to study the application of electronic computers to mechanical translation and the automatic processing of **language data**. The

committee will study computational linguistics, automatic abstracting, and the indexing and scanning of foreign-language texts, as well as equipment for character recognition and photo composition. Chairman of the committee is John R. Pierce of Bell Telephone Laboratories.

Films

The following are sound films, available from Coronet Films, Sales Dept., Coronet Bldg., Chicago, Illinois.

Synthesis of a Compound (13½ minutes; color, $125; black and white, $62.50). Deriving the simplest formula of cuprous sulfide (Cu_2S) by experimentally determining the weight ratio in which copper and sulfur combine, then performing the conventional calculations.

Elements, Compounds, Mixtures (30 minutes; $275, color; $137.50, black and white). Explanation of physical and chemical properties of iron and sulfur, including properties of a mixture of iron and sulfur, and the compound, ferrous sulfide.

Meeting Notes

The American Society of **Agricultural Engineers** will meet 8–11 December in New Orleans. Technical sessions are scheduled covering developments in power and machinery, electric power and processing, farm structures, soil and water, and education and research. (J. L. Butt, American Society of Agricultural Engineers, St. Joseph, Michigan)

A symposium on the **crystalline lens** will be held in Minneapolis, Minnesota, 2–5 December. NIH is the sponsor. The meeting will be concerned primarily with the biology of the normal lens, and will include speakers from the U.S. and foreign countries. (J. E. Harris, Department of Ophthalmology, University of Minnesota Medical School, Minneapolis 55455)

New Journals

Peace Research Abstracts, vol. 1, No. 1, June 1964. References and abstracts of papers published in several languages on peace, war, and world affairs. Alan and Hanna Newcombe, eds. (Canadian Peace Research Institute, 25 Dundana Ave., Dundas, Ontario, Canada. Monthly; $60 per year, organizations; $30 per year, individuals)

Surface Science, vol. 1, No. 1, January 1964. Physics and chemistry of interfaces. Harry C. Gatos, ed. (North-Holland Publishing Co., P.O. Box 103, Amsterdam, Netherlands. Quarterly; $16 per volume)

UN Monthly Chronicle, vol. 1, No. 1, May 1964. United Nations Office of Public Information. (Sales Section, Publishing Service, UN, New York. Monthly; $6 per year)

Journal of Medical Genetics, vol. 1, No. 1, September 1964. Arnold Sorsby, Ed. (Medical Market Research, Inc., East Washington Square, Philadelphia, Pa. 19105. Quarterly; $10 per year, U.S. subscriptions)

Data Processing Weekly News. vol. 1, No. 1, 20 April. P. B. Goodwin, Managing Ed. American Data Processing Inc., 22nd Floor, Book Tower, Detroit 26. $36 per year. Weekly review of activities and people in the data-processing industry.

Journal of Applied Probability. vol. 1, No. 1, June 1964. J. Gani, Ed., Department of Statistics, Michigan State Univ., East Lansing. Semi-annual, $8 for individuals, $12 for institutions. Research and review papers on applications of probability theory to the biological, physical, social, and technological sciences.

Scientists in the News

John L. Selfridge, formerly associate professor of mathematics at the University of Washington, Seattle, has become professor of computer science at the Pennsylvania State University mathematics department.

L. H. Schmidt, professor of comparative pharmacology at the University of California, has been appointed to head the recently formed Commission on Malaria, of the Armed Forces Epidemiological Board.

Texas A&M University has appointed **Fred D. Maurer** associate dean and professor of pathology. He had been head of the division of medicine and the pathology department in the U.S. Army Medical Research Laboratory, Fort Knox, Kentucky.

Yoshio Watanabe, professor of oral and maxillofacial surgery at Okayama University medical school, Japan, has been named visiting professor at the University of Illinois college of dentistry, Chicago.

Arthur K. Saz, formerly with the National Institute of Allergy and Infectious Diseases, has been appointed professor and chairman of the department of microbiology and tropical medicine at Georgetown University's medical school.

Marvin K. Nadel, principal research scientist with the New York City Department of Health, has been appointed manager, biological support and development at Space-General Corporation, El Monte, California.

Raymond E. Counsell, research chemist at G. D. Searle & Co., Chicago, has been appointed associate professor of pharmaceutical chemistry at the University of Michigan.

Veichow C. Juan, former director general of Academia Sinica, Taipei, Taiwan, has become professor of geology at the National Taiwan University.

Ralph N. Haber, formerly at Yale, has been appointed associate professor of psychology at the University of Rochester.

Paul C. Paris, associate professor of mechanics at Lehigh University, is on a 1-year leave of absence to direct the National Science Foundation's Undergraduate Instructional Scientific Equipment Program in Washington.

J. P. Ruina, currently on leave as professor of electrical engineering at M.I.T., has been elected president of the Institute for Defense Analyses, Washington, succeeding Richard M. Bissell, Jr. Ruina was Director of the Advanced Research Projects Agency from 1961 until July 1963.

Dean Amadon, American Museum of Natural History, New York City, has been elected president of the American Ornithologists' Union.

Peter L. Auer, formerly head of plasma physics research at the Sperry Rand Research Center, Sudbury, Massachusetts, has become deputy director of ballistic missile defense in the Advanced Research Projects Agency. He is succeeded by **Warren McBee**, a member of the Sperry Rand staff.