their behalf, and I, for my part, am much in sympathy with most of what Mr. Josephson says.

Still, we must not forget that bibliography is not an end, but simply a means, a method. I am, of course, chiefly concerned, not with external bibliography such as is needed in libraries, but with internal, critical bibliography. From this point of view, it is quite clear that the matter of essential importance is not the mere bibliographical technique—however important it may be—but a deep knowledge of the subject matter to be criticized.

I am quite agreed with Mr. Josephson, that many scientists show a deplorable lack of bibliographical method. Yet, I do not think it possible, as a rule, to train bibliographers for very special critical work. Anyhow it should be easier to teach bibliographical consistency to the scientists, than to make the bibliographers omniscient.

I hope that Mr. Josephson will be pleased with the following conclusion. There should be on the staff of the Institute at least one highly trained bibliographer, whose duty it would be to distribute the books and articles among expert critics and to see to it that their work, as far as external bibliography is concerned, be as accurate and uniform as possible. His functions would chiefly be those of a bibliographical editor.

At the present time, excellent critical bibliographies are periodically published for almost all the branches of science, but there is none really satisfactory for their history, philosophy or for the organization of the whole. I had tried to organize such a bibliographical service in *Isis*, but unfortunately this publication was stopped by the war, just when I was beginning to see my way to do it well. The publication of such a bibliography would naturally be incumbent on the institute; considerable pains should be taken to make it as perfect as possible—but it would only be a means to a higher end.

GEORGE SARTON

HARVARD UNIVERSITY

THE MEDICAL SCHOOL OF THE UNI-VERSITY OF PENNSYLVANIA AND WAR SERVICE ¹

The same splendid equipment and patriotism that enabled the graduates of Pennsylvania's medical school to take a preeminent position in the surgical and medical work of the Civil War, both in the north and south, promises to produce similar results in the present great war. It is too early to compile any trustworthy records of the great army of physicans and surgeons who are now in the service, but the lists grow longer every day.

Aside from what the medical alumni as a class are doing, the medical school as a whole is giving to the utmost of the skilled men on its faculty. Already between sixty and seventy members are in the government service, many of them occupying positions of the utmost importance. In fact, so many have gone that the teaching staff is maintaining its high standard only by the self-sacrificing effort of those who have remained.

Pennsylvania can take a pardonable pride in the fact that five of the base hospital units which have gone or are prepared to go from this city are under the direction of Pennsylvania men, while graduates of the University comprise most of their staffs. The University Base Hospital Unit No. 20, which has been ready to sail for several weeks, has Dr. J. B. Carnett for its director. Episcopal Base Hospital is under the direction of Dr. A. P. C. Ashurst. Dr. John H. Jopson occupies a similar position with the Presbyterian Base Hospital, while Dr. Robert Le-Conte, a member of the Board of Trustees, is director of the Naval Base Hospital No. 5 from the Methodist Hospital. Dr. Richard H. Harte is director of the Base Hospital No. 10, which the Pennsylvania Hospital sent to France last June.

In addition to the foregoing, Lieutenant Colonel Henry Page, '94 M., is commander of the Medical Training Camp at Fort Oglethorpe, Ga. On this staff are such men of national repute as Dean William Pepper, of

¹ From Old Penn.

the Medical School, and Dr. Alexander C. Abbott, while others have been sent to other camps.

Those members of the staff who are still on active duty at home are concentrating all their energies toward helping America to win the war. In addition to carrying on the regular work, a course in neurology and brain surgery is being given in the medical school under the direction of Dr. Charles Frazier.

About fifty officers of the Medical Reserve have been picked by the War Department to take this course preparatory to their assignment to duty either with the various training camps or in France. Dr. Frazier has charge of the course in clinical surgery. His assistants and the courses on which they are lecturing are: Dr. George Dorrance, anatomy; Dr. Theodore Weisenberg, physiology; Dr. S. D. Ludlam, pathology; Dr. George P. Mueller, operative surgery on the cadaver, and Dr. William G. Spiller, neurological diagnosis.

The officers taking this course come from all parts of the United States, Pennsylvania having been designated by the War Department as the particular institution to fit officers doing medical work along these lines.

It should be explained that there are several members of the medical school faculty who are doing very important government work, but still keeping up their work in the medical Among these may be mentioned Dr. Taylor, professor of physiological chemistry: Dr. Richard M. Pearce, professor of research medicine, and Dr. Edward Martin, professor of surgery. Dr. Taylor, who performed important service for the State Department in Germany and France before our entry into the war, is now giving the government the benefit of his experience on the exportation of foodstuffs to neutral countries; Dr. Pearce is doing work for the Red Cross, while Dr. Martin is a member of the Council of National Defense. The following is a nearly complete list of those members of the medical school faculty who have been given leave of absence to serve the government:

Dr. Walter W. Cornell, instructor in osteology. Now stationed at Fort Benjamin Harrison, Ind. Dr. Penn Gaskill Skillern, instructor in anatomy. In the Navy with rank of lieutenant.

Dr. J. Leon Herman, instructor in anatomy. Member of Navy Base Hospital No. 5 with rank of lieutenant.

Dr. Alexander C. Abbott, director of the department of hygiene and bacteriology. Now stationed at Fort Oglethorpe, Ga., with rank of major.

Dr. David H. Bergey, assistant professor of hygiene and bacteriology. Now stationed at Fort Oglethorpe, with rank of captain.

Dr. Robert A. Kelty, instructor in pathology. In the Army.

Dr. Baldwin H. Lucke, assistant instructor in pathology. In the Army with rank of first lieutenant.

Dr. John Speese, instructor in surgery and surgical pathology. In the Army with rank of first lieutenant.

Dr. Henry P. Brown, Jr., assistant instructor in surgical pathology. In the Army with rank of first lieutenant.

Dr. Alfred R. Allen, associate professor of neuropathology. In the Army with rank of major.

Dr. Samuel Leopold, instructor in neuro-pathology. In the Army.

Dr. William B. Cadwallader, instructor in neuropathology. In the Army.

Dr. M. Howard Fussell, professor of applied therapeutics. In service with the Tuberculosis Commission of the Army with rank of captain.

Dr. William Pepper, assistant professor of clinical pathology and dean of the medical school. Assigned to Fort Oglethorpe, Ga., in charge of one battalion with rank of major.

Dr. Albert P. Francine, associate professor of medicine. In Army wth rank of captain.

Dr. J. H. Austin, associate in medicine. Assigned to the Rockefeller Institute with rank of first lieutenant.

Dr. G. G. Ross, instructor in surgery. Member of Naval Base Hospital No. 5 with rank of lieutenant. Ordered to France September 15.

Dr. D. B. Pfeiffer, instructor in surgery. Assigned to Fort Oglethorpe with rank of captain.

Dr. A. P. C. Ashurst, instructor in surgery. Director of Episcopal Base Hospital Unit with rank of major.

Dr. E. L. Eliason. Member of University Base Hospital Unit No. 20 with rank of major.

Dr. George M. Laws, instructor in surgery. Member of University Base Hospital Unit No. 20. Now on duty at Fort Hancock, Augusta, Ga., with rank of first lieutenant. Dr. Thomson F. Edwards, assistant instructor in surgery. In Army.

Dr. Rutherford L. John, assistant instructor in surgery. In Army.

Dr. Henry Winsor, assistant instructor in operative surgery. Captain in Sanitary Detachment of Second Battalion Signal Corps, Camp Jackson, Columbia, S. C., with rank of captain.

Dr. Allan C. Woods, assistant professor of research medicine. Now on duty in France with Base Hospital No. 10 with rank of captain.

Dr. De Forrest P. Willard, instructor of orthopedic surgery. Now at Shepherd's Bush Hospital, London, Eng., with rank of captain.

Dr. F. E. Keene, instructor in gynecology. Member of University Base Hospital Unit No. 20 with rank of first lieutenant.

Dr. F. C. Knowles, instructor in dermatology. In France with Base Hospital No. 10 with rank of first lieutenant.

Dr. E. H. Goodman, associate in medicine. Assigned to Base Hospital at Greenville, S. C., with rank of major.

Dr. G. M. Piersol, associate in medicine. In Army with rank of major.

Dr. J. H. Musser, associate in medicine. In Army with rank of first lieutenant.

Dr. C. B. Farr, associate in medicine. Assigned to Fort Oglethorpe with rank of first lieutenant.

Dr. E. B. Krumbhaar, associate in medicine. In Army.

Dr. J. H. Cruice, instructor in medicine. In Army.

Dr. Ward Brinton, instructor in medicine. In Army.

Dr. N. B. Gwyn, instructor in medicine. With British Army Medical Corps.

Dr. A. H. Gerhard, instructor in medicine. In

Dr. T. G. Schnabel, instructor in medicine. In Army.

Dr. H. B. Wilmer, assistant instructor in medicine. In Army with rank of first lieutenant.

Dr. George Wilson, assistant instructor in medicine. In Army with rank of first lieutenant.

Dr. Herbert Fox, director of Pepper Clinical Laboratory. In Army, assigned to Louisville, Ky.

Dr. J. E. Sweet, assistant professor of surgical research. In France with Base Hospital No. 10 with rank of captain.

Dr. Richard H. Harte, adjunct professor of surgery. Director of Base Hospital No. 10, now in France with rank of major.

Dr. John H. Jopson, associate in surgery. Di-

rector of Presbyterian Base Hospital with rank of major.

Dr. J. B. Carnett, associate in surgery. Director of University Base Hospital Unit No. 20 with rank of major.

Dr. George E. de Schweinitz, professor of ophthalmology. On duty in General Medical Board and Commission of Ophthalmology in Council of National Defense, at Washington, with rank of major.

Dr. H. Maxwell Langdon, instructor in ophthalmology. Now on duty at University Hospital examining candidates for Aviation Corps with rank of first lieutenant.

Dr. Philip F. Williams, instructor in obstetrics. Member of University Base Hospital Unit. Now at Fort Oglethorpe with rank of captain.

Dr. Edmund J. Piper, instructor in obstetrics. In Army with rank of first lieutenant.

Dr. Benjamin D. Parrish, instructor in otology. In Army.

Dr. James A. Babbitt, instructor in otology. Now with Haverford College Unit in France.

Dr. Isaac H. Jones, instructor in Otology. In Army with rank of major.

Dr. Warren Stirling, assistant in bacteriology. Now stationed at Fort Benjamin Harrison with rank of first lieutenant.

Dr. Andrew Anders, lecturer in medicine. Ordered to Fort Oglethorpe, Ga., with rank of first lieutenant.

Dr. Stilwell C. Burns, instructor in surgery. Now on duty at Spartanburg, S. C., with rank of captain.

Dr. W. Easterly Ashton, professor of gynecology. Assigned to 300th Heavy Artillery with rank of major.

Dr. John W. McGlenn, assistant professor of obstetrics. In charge of Naval Station Hospital No. 2 at League Island with rank of first lieutenant.

Dr. Charles B. Reynolds, assistant professor of obstetrics. First lieutenant 309th Infantry.

SCIENTIFIC EVENTS

THE TOTAL ECLIPSE OF THE SUN IN 1918

THE department of astronomy and astrophysics at the University of Chicago is making preparation for observing the total eclipse of the sun, which will be one of the six to occur in the United States during the present century. This total eclipse will be visible on June 8, 1918, over a narrow strip having a maximum width of about sixty miles