ence and Civilization is one of the most important and fruitful suggestions that have been made for the advancement of knowledge. is to be hoped that the realization of his idea might come soon and not have to wait until that rather indefinite time-"after the war." As Dr. Sarton very properly points out, it would be particularly important and fitting if this institute would be founded in this country at this time. That the United States, since he wrote his communication, has entered the war should make no difference. We are, as I understand it, fighting for internationalism and the founding of the institute now would emphasize the international spirit of American science.

What most particularly interests me in Dr. Sarton's plan is the place he gives to Bibliography. Some readers of Science will perhaps remember a couple of communications that the present writer sent to this journal, now many years ago, on the subject of a proposition for an Institute for Bibliographical Research. The two ideas should be combined. A third idea might perhaps be added to this combination, namely the plan for a lending library for libraries, consisting of large and expensive works, chiefly periodicals, transactions and collections, just the kind of publications that the Institute would need for the proper carrying on of its researches; that the collections of such a library would have to be made available to students all over the country should make no difference; it would emphasize the national character of the Institute.

Now, as to Bibliography, one of the first duties of the Institute would be to prepare an adequate and, as far as possible, complete bibliography of the history of science. The "List of Books on the History of Science," with its Supplement and its companion "List of Books on the History of Industry," published by The John Crerar Library, is merely a bringing together of the material, and only part of the material, for such a bibliography. Furthermore, bibliographical research must be one of the principal methods of study in the institute. There should be a separate, specially organized, division for Bibliography, the func-

tion of which should be not only to carry on bibliographical research and publication, but to give those who come to the institute what they do not seem to get in American universities, a much needed training in the technique of bibliographical compilation and recording. It is not uncommon to find otherwise well equipped scholars totally incapable, apparently, of making bibliographical references in a consistent and systematic way, though thoroughly familiar with the bibliography of their subjects and its byways. Those who are interested in a few examples, will find them in an article by the present writer in volume 7 of the Papers of the Bibliographical Society of America, entitled "Efficiency and Bibliographical Research."

AKSEL G. S. JOSEPHSON THE JOHN CREAR LIBRARY

POPULAR NAMES OF PLANTS

To the Editor of Science: My attention was recently called to an article in your issue of February 2 concerning popular names of North American plants. I especially noted the following sentence:

It is clear, however, that pupils in the public schools, as well as many of their teachers, do not take any interest in or remember the Latin names of plants. This being so, it is highly desirable that every species of plant inhabiting the United States and Canada should have an English name. It is further desirable that the name should not be a local one....

Several years ago when acting as editor-inchief of The Nature-Study Review, I took interest in this question of popular names of plants and discussed it with many competent teachers of nature-study. I was forced to the conclusion that in a large number of cases it is possible and highly desirable that we should make the English out of the generic names. It is my observation that children learn these names quite as easily as they do English names with which they are not already familiar. It is nonsense to claim that children can not learn scientific names, for example, chrysanthemum and hippopotamus. As examples of familiar plants which are very generally known by their scientific names or

by slight modifications thereof, I cite the following list: cosmos, centaurea, aster, alyssum, ageratum, dahlia, canna, petunia, portulaca, primula (primrose), salvia, verbena, zinnia, impatiens, rosa (rose), gaillardia, heliotropium (heliotrope), lobelia, lilium (lily), magnolia, hyacinthus, chrysanthemum, anemone, oxalis, wistaria, clematis, iris, spirea, pæonia (peony), forsythia, phlox, gladiolus, begonia, asparagus, arbutus, coreopsis, smilax, trillium, viola (violet), geranium, fuchsia, tulipa (tulip), catalpa.

The suggestion that a species of *Erechtites* be called white fireweed and one of *Epilobium* be purple fireweed shows the absurdity of trying to standardize local names, for there are white species of *Epilobium*. I am sure that it is easier for school children to learn this scientific name qualified by white or purple.

There are some interesting popular confusions of scientific terms, e. g., syringa is a popular name but unfortunately has become attached to mock orange (*Philadelphus*) instead of correctly to lilac, which as an English name has been applied to various kinds of shrubs.

M. A. BIGELOW

QUOTATIONS

TECHNICAL COLLEGE GRADUATES IN WAR TIME

One of the first effects of the entry of America into the war has been the volunteering of the graduating classes, nearly en masse, throughout the country, into national defense service, with a considerable number of enlistments also in junior classes. This dedication of our trained youth for the maintenance of justice against brute-strength aggression is an admirable thing, and no one who believes in the ideals of young men will oppose it. It is important to remember, however, that injudicious dedication to the world's good may actually do the world harm, and well-intended action may by over-haste defeat its own purpose.

War is a vast country-wide engineering enterprise. Theoretically speaking, an allwise and powerful board of experts should de-

termine where each man and woman should be posted in the great war chain of fighters, for it is obvious that all specially trained men, and particularly all technically trained men, should keep at the posts where their training is needed. It was an inevitable mistake made by our allies at an earlier stage in the war which led many young physicians, engineers, mechanics and valuable specialists to rush as volunteers for the front. It may overtax human intelligence to decide whether any particular man of military age is more needed at the front or at the rear. Mistakes must occur, and many of them; but the technically trained men should be kept at their profession unless there happens to be a superfluity of them. So long as there are earnestness and determination to serve, they also serve who only stand and wait. The junior men in colleges, and particularly in technical or medical colleges, will probably serve their country better by working hard at their educational preparation than by abandoning their college work before their training is completed. In general, however, every day's work done in any sort of productive employment contributes to the war and therefore hastens the end of the war. To do any useful thing hard is to fight for the Allies.—The Electrical World.

DISCOVERIES AND INVENTIONS

The fact can scarcely be reiterated too frequently that the government should extend patronage to scientific investigations and mechanical inventions. Such a step is necessary to promote the arts and industries as well as to safeguard the nation in war. The United States can no longer proceed on a policy of bungling and neglect. Even the Naval Consulting Board is inadequate to the needs of the present emergency. The ability of its individual members is high, but the number of problems to which the board can give its attention is limited by the restricted membership.

The problems taken up by these most competent experts are undoubtedly the most urgent, but even on these particular problems