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 all-wise and powerful board of experts should determine 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

the country is not receiving the benefit of all of the ideas worth considering. Independent inventors are reluctant to contribute the fruits of their efforts through a board whose members are identified with large industrial concerns. Unfortunately the sad story of the inventor who receives no compensation for his discoveries is only too well known. He lacks the means for proper experimentation, as well as for manufacture, and to obtain aid of the capitalist he has to mortgage his prospects too heavily.

A correspondent has suggested that prizes should be offered to stimulate individual enterprise, but only investigators having private means would be in a position to compete for such prizes. It would be a better plan for the government to offer scholarships and to maintain extensive research laboratories and shops where experimental work could be done on a large scale. The work of thousands of inventors is entirely wasted not only because of duplication, but because they are compelled to abandon their investigations after making some discoveries of more or less potential value. If records of their work were preserved a new epoch in the advancement of science might be inaugurated.

On April 2, W. H. Fauber, of Brooklyn, addressed a paper to the board of governors of the Aero Club of America advocating the creation of a government board of invention and research in aeronautics. He also called attention to the fact that it takes so long to adjudicate a patent that the inventor is apt to die during the process, and that an invention really is not protected unless it is in the hands of a powerful corporation.—The New York *Evening Sun.*

SCIENTIFIC BOOKS

BOOKS ON FOOD

William M. Bayliss, the celebrated English physiologist, has written a small volume entitled "The Physiology of Food and Economy in Diet" (Longmans, Green and Co., 1917). In a hundred pages he presents in clear, concise and fascinating language the fundamental principles of nutrition. Bayliss, though noted for his work on the secretory glands and not recognized as an expert on nutrition, has nevertheless written with the appreciative touch characteristic of the master mind.

Miss Winifred Stuart Gibbs, the supervisor of home economics of the New York Association for Improving the Condition of the Poor, has made a valuable contribution to the food problem in "The Minimum Cost of Living" (The Macmillan Co., 1917). The income and expense accounts of seventy-five families receiving charitable aid, in the form both of advice and of money, were analyzed. A food allowance made up from twenty-two items in quantities calculated to suffice for the maintenance of the family, as constituted, gave very successful results. The author states: "Any one who has had experience in working with the tenement population knows how intimate a connection exists between food and the more common diseases of poverty." Thus, before the allowance was granted, record after record read, "children anemic," or "mother suffering from malnutrition." But the allowance of a minimum standard laid the foundation of good health. "Such a sum can restore shattered nerves and renew courage for a mother who has been harassed by irregular and uncertain payments of an income inadequate at best. Such an assured minimum can change pale, listless children into rosy-cheeked romping boys and girls." The "unit" of value for food per "man" per day was taken at 3,000 calories and cost on October 1, 1916, thirty-four cents. Children were rated according to their ages at various fractions of a "man." These latter values appear to be minima. The book tells of an inspiring deed of good work.

Another book, "Food for the Worker," by Miss Frances Stern and Miss Gertrude T. Spitz, with a foreword by Lafayette B. Mendel (Whitcomb and Barrows, 1917), should fill a great need at the present time. In this volume are found 120 household receipts, with their food values, and the arrangement of these recipes into different menus of balanced rations for use during a period of forty-nine days or seven weeks. It should be of aid to any economical housewife, although it aims specifically