

staple articles where confidence in the seller or exceptional skill are not essential features. The possible economy of large-scale production and the undertaking by one organization of the various processes, even from the raw material through manufacture and distribution to the consumer, has been demonstrated by some of the great corporations of the country. However much we may decry this tendency, we may be reasonably certain that it will be adopted more and more in the future.

It would be rash to predict an early return to low prices. All the great factors which I have partially portrayed depend upon new conditions which have arisen, some of which are inseparably connected with substantial benefits to the human race. If prices have increased, human enjoyment has increased also.

That which is most noticeable in the consideration of this problem is the wide variation in the changing cost of divers commodities and facilities. After making due allowance, however, for this variation, there is a manifest increase in the general price level. Great economic laws will be potent in their effect upon these conditions. The enormous increase in the production of gold will be checked as this metal becomes less valuable in comparison with useful articles. Indeed, this fact is already forecast by the diminished annual increase in the years 1910 and 1911. The increasing price of farm products may stimulate a "back to the farm" movement, but whether this proves true or not it will undoubtedly encourage more scientific methods of cultivation and thus increase the average yield per acre. More intelligent and more adequate control will be exercised over great industrial and commercial organizations so that the benefit of modern developments in industry and

commerce may accrue in proper measure to all classes of consumers.

The same advances which have been made in production and in the distribution of great masses of commodities will, as far as possible, be applied to the minutest details of distribution. Our natural resources which have been wasted, or too largely absorbed by the few, will be more carefully utilized and every possible means be taken to preserve a proper share of them for the future. Thus in this present increase of prices as in all great economic changes there may be reasonable assurance that the ultimate effect will bring to all substantial benefit rather than harm.

T. E. BURTON

*THE CENTENARY OF THE ACADEMY OF
NATURAL SCIENCES OF PHILADELPHIA*

EARLY in the past year resolutions were adopted by the council of the Academy of Natural Sciences of Philadelphia approving of a fitting celebration of the centenary of the society on the nineteenth, twentieth and twenty-first of next March. The president appointed a committee of forty-one to make arrangements for such celebration.

The general committee, of which the president, Samuel G. Dixon, M.D., LL.D., is chairman, has been divided into sub-committees on printing and publications, meetings and addresses, invitations, finance and entertainment. In harmony with a preliminary report of this committee the publication of three volumes has been decided upon: A commemorative quarto volume of scientific memoirs, adequately illustrated; an index to the series of *Proceedings* and *Journal* up to and including 1910, now amounting to nearly one hundred volumes, and a detailed history of the academy by Dr. Nolan, of which the chapter contributed by him in 1908 to the "Founders' Week Memorial Volume" may be considered a prodromus. The last mentioned volume will be illustrated by portraits and views.

It has been decided to hold the first session on the meeting night of the academy, on

March 19, when delegates will be received and historical addresses will probably be delivered; two morning sessions will be devoted to the reading of scientific papers by members, correspondents and delegates; on the afternoon of the second day a microscopical exhibition will be given and the resources of the academy demonstrated; on the evening of that day a reception will be tendered by the president to members, guests and friends; and the proceedings will end with a banquet on the evening of March 21, the official birthday, of the academy.

The preparation of the proposed publications is progressing satisfactorily and the dignity and importance of the commemorative volume is assured. It is hoped that a united effort may be made to secure for the occasion a success commensurate with its importance in the history of the academy and in its relation to the advancement of science in America.

SCIENTIFIC NOTES AND NEWS

DR. FREDERIC A. LUCAS, director of the American Museum of Natural History, has been made a corresponding member of the Zoological Society of London.

DR. AUGUST WEISMANN, professor of zoology in the University of Freiburg, will retire in April.

DR. GEORGE B. SHATTUCK has retired from the active editorial management of the *Boston Medical and Surgical Journal* after a service of thirty-one years.

We learn from the *Journal* of the American Medical Association that Professor Theodor Ziehen, director of the psychiatric and neurologic clinic in Berlin, will resign his position at the end of the winter semester and discontinue all medical work, in order to devote himself exclusively to research in psychology. For this purpose, he will remove to Wiesbaden, where he will erect for himself a private psychological laboratory.

PROFESSOR ARMIN BALTZER, Berne, and Dr. Emmanuel de Margerie, Paris, have been elected foreign members and Professor Charles Depéret, Lyons, and Professor Arvid Gustaf

Högbom, Upsala, have been elected foreign correspondents of the Geological Society of London.

M. LECLAINCHE, professor in the veterinary school at Toulouse, has been elected a corresponding member of the Paris Academy of Sciences, in the section of agriculture.

At the ordinary scientific meeting of the London Chemical Society on December 21, 1911, it was announced that the council had awarded the Longstaff medal for 1912 to Dr. H. Brereton Baker, F.R.S.

At the dinner of the Western Society of Engineers, Chicago, on January 10, announcement was made of the award of the Octave Chanute Medal for 1910 in electrical engineering to Mr. H. B. Gear, general inspector of the Commonwealth Edison Company, Chicago, for his work on "devices for the distribution of electric light and power." Mr. C. P. Berg received the medal for mechanical engineering in the heat treatment of high-speed tools, and Mr. C. K. Mohler was awarded the medal in civil engineering for his studies of earth pressures.

THE Institution of Mining and Metallurgy of Great Britain has awarded gold medals as follows: Gold Medal of the Institution (two awards): (a) to Mr. E. P. Mathewson, M.Inst.M.M., general manager of the Anaconda Copper Company, Arizona, in recognition of his services in the advancement of metallurgy generally, and especially in regard to copper; (b) to Mr. Walter McDermott, M.Inst.M.M., in recognition of his services in the equipment of the Bessemer Laboratory of the Royal School of Mines and as the representative of the institution on the Board of Governors of the Imperial College of Science and Technology during the period of its establishment and organization; and to signalize his services in the advancement of metallurgical practise. The Consolidated Gold Fields of South Africa (Limited) Gold Medal to Mr. Walford R. Dowling, M.Inst.M.M., for his paper on "The Amalgamation of Gold in Banket Ore."

PROFESSOR H. W. RILEY, head of the de-